UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-K

(Mark One)
DIV ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the fiscal year ended December 31, 2018
OR
DIV TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
Commission File Number 001-37511

Sunrun Inc.
(Exact name of Registrant as specified in its Charter)

Delaware
(State or other jurisdiction of incorporation or organization)

595 Market Street, 29th Floor
San Francisco, California
(Address of principal executive offices)

26-2841711
(I.R.S. Employer Identification No.)

94105
(Zip Code)

Registrant’s telephone number, including area code: (415) 580-6900

Securities registered pursuant to Section 12(b) of the Act: Common Stock, Par Value $0.0001 Per Share; Common Stock traded on the NASDAQ Global Select Stock Market

Securities registered pursuant to Section 12(g) of the Act: None

Indicate by check mark if the Registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. YES ☒ NO ☐

Indicate by check mark if the Registrant is not required to file reports pursuant to Section 13 or 15(d) of the Act. YES ☐ NO ☒

Indicate by check mark whether the Registrant: (1) has filed all reports required to be filed by Section 13 or 15(d) of the Act during the preceding 12 months (or for such shorter period that the Registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. YES ☒ NO ☐

Indicate by check mark whether the Registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the Registrant was required to submit and post such files). YES ☒ NO ☐

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§229.405) is not contained herein, and will not be contained, to the best of Registrant’s knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K ☒

Indicate by check mark whether the Registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definition of "large accelerated filer", "accelerated filer", "smaller reporting company", and "emerging growth company" in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer ☒
Accelerated filer ☐
Non-accelerated filer ☐ (Do not check if a smaller reporting company)
Smaller reporting company ☐
Emerging growth company ☐

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Indicate by check mark whether the Registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). YES ☐ NO ☒

The aggregate market value of the voting and non-voting common equity held by non-affiliates of the Registrant, based on the closing price of the shares of common stock on The NASDAQ Stock Market on, December 31, 2018 was approximately $11.17 billion.

The number of shares of Registrant’s Common Stock outstanding as of February 25, 2019 was 113,856,831.

Portions of the information called for by Part III of this Form 10-K is hereby incorporated by reference from the definitive Proxy Statements for our annual meeting of stockholders, which will be filed with the Securities and Exchange Commission not later than 120 days after December 31, 2018.
# Table of Contents

## PART I
- **Item 1.** Business .................................................. 3
- **Item 1A.** Risk Factors ............................................. 9
- **Item 1B.** Unresolved Staff Comments ......................... 36
- **Item 2.** Properties ............................................... 37
- **Item 3.** Legal Proceedings ...................................... 37
- **Item 4.** Mine Safety Disclosures .............................. 37

## PART II
- **Item 5.** Market for Registrant’s Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities ..... 38
- **Item 6.** Selected Financial Data .................................. 39
- **Item 7.** Management’s Discussion and Analysis of Financial Condition and Results of Operations ................................. 41
- **Item 7A.** Quantitative and Qualitative Disclosures About Market Risk ................................................................. 59
- **Item 8.** Financial Statements and Supplementary Data ....................................................................................................... 60
- **Item 9.** Changes in and Disagreements With Accountants on Accounting and Financial Disclosure .............................................. 108
- **Item 9A.** Controls and Procedures ................................ 109
- **Item 9B.** Other Information ........................................... 109

## PART III
- **Item 10.** Directors, Executive Officers and Corporate Governance ................................................................................. 110
- **Item 11.** Executive Compensation .................................. 110
- **Item 12.** Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters ............................................. 110
- **Item 13.** Certain Relationships and Related Transactions, and Director Independence ........................................................................ 110
- **Item 14.** Principal Accounting Fees and Services ............... 110

## PART IV
- **Item 15.** Exhibits, Financial Statement Schedules ............... 111
SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS.

The discussion in this Annual Report on Form 10-K contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended (the "Securities Act"), and Section 21E of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), which statements involve substantial risks and uncertainties. Forward-looking statements generally relate to future events or our future financial or operating performance. In some cases, you can identify forward-looking statements because they contain words such as "may," "will," "should," "expects," "plans," "anticipates," "could," "intends," "target," "projects," "contemplates," "believes," "estimates," "predicts," "potential" or "continue" or the negative of these words or other similar terms or expressions that concern our expectations, strategy, plans or intentions. Forward-looking statements contained in this Annual Report on Form 10-K include, but are not limited to, statements about:

- the availability of rebates, tax credits and other financial incentives, and the expected decreases to the federal commercial and residential investment tax credits ("ITCs") that begin after December 31, 2019;
- determinations by the Internal Revenue Service of the fair market value of our solar energy systems;
- the retail price of utility-generated electricity or electricity from other energy sources;
- regulatory and policy development and changes;
- our ability to manage our supply chains and distribution channels;
- our industry's, and specifically our, continued ability to manage costs (including, but not limited to, equipment costs) associated with solar service offerings;
- our strategic partnerships and expected benefits of such partnerships;
- the sufficiency of our cash, investment fund commitments and available borrowings to meet our anticipated cash needs;
- our need and ability to raise capital, refinance existing debt, and finance our operations and solar energy systems from new and existing investors;
- the potential impact of interest rates on our interest expense;
- our business plan and our ability to effectively manage our growth, including our rate of revenue growth;
- our ability to further penetrate existing markets, expand into new markets and our expectations regarding market growth (including, but not limited to, expected cancellation rates);
- our expectations concerning relationships with third parties, including the attraction, retention and continued existence of qualified solar partners;
- the impact of seasonality on our business;
- our investment in research and development and new product offerings;
- our ability to protect our intellectual property and maintain our brand;
- our expectations regarding certain performance objectives and the renewal rates and purchase value of our solar energy systems after expiration of our Customer Agreements; and
- the calculation of certain of our key financial and operating metrics and accounting policies.

These forward-looking statements are subject to a number of risks, uncertainties and assumptions, including those described in the section titled "Risk Factors" and elsewhere in this Annual Report on Form 10-K. Moreover, we operate in a very competitive and rapidly changing environment, and new risks emerge from time to time. It is not possible for our management to predict all risks, nor can we assess the impact of all factors on our business or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained in any forward-looking statements we may make. In light of these risks, uncertainties and assumptions, the forward-looking events and circumstances discussed in this Annual Report on Form 10-K may not occur and actual results could differ materially and adversely from those anticipated or implied in the forward-looking statements.

You should not rely upon forward-looking statements as predictions of future events. Although we believe that the expectations reflected in the forward-looking statements are reasonable, we cannot guarantee that the future
results, levels of activity, performance or events and circumstances reflected in the forward-looking statements will be achieved or occur. Moreover, neither we
nor any other person assumes responsibility for the accuracy and completeness of the forward-looking statements. We undertake no obligation to update
publicly any forward-looking statements for any reason after the date of this Annual Report on Form 10-K to conform these statements to actual results or to
changes in our expectations, except as required by law.

You should read this Annual Report on Form 10-K and the documents that we reference in this Annual Report on Form 10-K and have filed with the
Securities and Exchange Commission (the “SEC”) as exhibits to this Annual Report on Form 10-K with the understanding that our actual future results, levels of
activity, performance, and events and circumstances may be materially different from what we expect.
PART I

Item 1. Business.

Overview

Sunrun’s (the “Company”) mission is to provide homeowners with clean, affordable solar energy and storage, and a best-in-class customer experience. In 2007, we pioneered the residential solar service model, creating a low-cost solution for homeowners seeking to lower their energy bills. By removing the high initial cost and complexity of cash system sales that used to define the residential solar industry, we have fostered the industry’s rapid growth and exposed an enormous market opportunity. Our relentless drive to increase the accessibility of solar energy is fueled by our enduring vision: to create a planet run by the sun.

We provide clean, solar energy typically at savings compared to traditional utility energy. Our primary customers are residential homeowners. We also offer battery storage along with solar systems to our customers in select markets and sell our services to certain commercial developers through our multi-family and new homes offerings. After inventing the residential solar service model and recognizing its enormous market potential, we have built the infrastructure and capabilities necessary to rapidly acquire and serve customers in a low-cost and scalable manner. Today, our scalable operating platform provides us with a number of unique advantages. First, we are able to drive distribution by marketing our solar service offerings through multiple channels, including our diverse partner network and direct-to-consumer operations. This multi-channel model supports broad sales and installation capabilities, which together allow us to achieve capital-efficient growth. Second, we are able to provide differentiated solutions to our customers that, combined with a great customer experience, we believe will drive meaningful margin advantages for us over the long term as we strive to create the industry’s most valuable and satisfied customer base.

Our core solar service offerings are provided through our lease and power purchase agreements, which we refer to as our “Customer Agreements” and which provide homeowners with simple, predictable pricing for solar energy that is insulated from rising retail electricity prices. While homeowners have the option to purchase a solar energy system outright from us, most of our customers choose to buy solar as a service from us through our Customer Agreements without the significant upfront investment of purchasing a solar energy system. With our solar service offerings, we install solar energy systems on our customers’ homes and provide them the solar power produced by those systems for typically a 20-year initial term. In certain markets, we offer a 25-year initial term service offering. In addition, we monitor, maintain and insure the system during the term of the contract. In exchange, we receive predictable cash flows from high credit quality customers and qualify for tax and other benefits. We finance portions of these tax benefits and cash flows through tax equity, non-recourse debt and project equity structures in order to fund our upfront costs, overhead and growth investments. We develop valuable customer relationships that can extend beyond this initial contract term and provide us an opportunity to offer additional services in the future, such as our home battery storage service. Since our founding, we have continued to invest in a platform of services and tools to enable large scale operations for us and our partner network -- which partners include solar integrators, sales partners, installation partners and other strategic partners. The platform includes processes and software, as well as fulfillment and acquisition of marketing leads. We believe our platform empowers new market entrants and smaller industry participants to profitably serve our large and underpenetrated market without making the significant investments in technology and infrastructure required to compete effectively against established industry players. Our platform provides the support for our multi-channel model, which drives broad customer reach and capital-efficient growth.

Delivering a differentiated customer experience is core to our strategy. We emphasize a customized solution, including a design specific to each customer’s home and pricing configurations that typically drive both customer savings and value to us. We believe that our passion for engaging our customers, developing a trusted brand, and providing a customized solar service offering resonates with our customers who are accustomed to a traditional residential power market that is often overpriced and lacking in customer choice.

We have experienced substantial growth in our business and operations since our inception in 2007. As of December 31, 2018, we operated the second largest fleet of residential solar energy systems in the United States and provided our solar services to approximately 233,000 customers in 22 states, as well as the District of Columbia and Puerto Rico. We have deployed an aggregate of 1,575 megawatts (“MW”) as of December 31, 2018, and our Gross Earning Assets as of December 31, 2018 were approximately $3.1 billion. Please see the section entitled “Management’s Discussion and Analysis of Financial Condition and Results of Operations — Key Operating Metrics” for more details on how we calculate Megawatts Deployed and Gross Earning Assets.
We also have a long track record of attracting low-cost capital from diverse sources, including tax equity and debt investors. Since inception we have raised tax equity investment funds to finance the installation of solar energy systems.

Our Multi-Channel Capabilities

Our unique, multi-channel capabilities offer consumers a compelling solar service through scalable, cost-effective and consumer-friendly channels. Homeowners can access our products through three channels: direct-to-consumer, solar partnerships and strategic partnerships.

Direct-to-Consumer

We sell solar service offerings and install solar energy systems for homeowners through our direct-to-consumer channel. These solar energy systems are offered to homeowners either under a Customer Agreement or for purchase. This channel consists of an online lead generation function, a telesales and field sales team, a direct-to-home sales force, a retail sales team and an industry-leading installation organization.

Solar Partnerships

We contract with diverse solar organizations that act as either exclusive or non-exclusive (depending on the terms of their contract with us) distributors of our solar service offerings and subcontractors for the installation of the related solar energy systems. Because of our commitment to these solar organizations and our vested interest in their success, we refer to them as our “solar partners,” although the actual legal relationship is that of an independent contractor. Our solar partners include:

- Solar integrators: trained and trusted partners who originate customers for our solar service offerings and procure and install the solar energy systems on our customers’ homes on our behalf as our subcontractors. Partnerships with solar integrators allow us to expand our brand, quickly enter new markets and drive capital-efficient growth. We compensate our solar integrators on a per solar energy system basis for generating Customer Agreements and the installation work they perform for us.
- Sales partners: sales and lead generation partners who provide us with high-quality leads and customers at competitive prices. We compensate our sales partners on a per customer basis for the sales and lead generation services they perform for us. All contracts are between the customer and us, based on a price set by us.
- Installation partners: trusted installation partners who procure and install a subset of our solar energy systems as our subcontractors and allow us to more efficiently deploy a mix of in-house and outsourced installation capabilities. We compensate our installation partners on a per solar energy system basis for the procurement of materials and installation work they perform for us. Installation partners are solely our subcontractors and do not enter into any agreements with our customers.

Our ability to connect specialized sales and installation firms on a single platform, which we license to our solar partners at no cost, allows us to enjoy the benefits of vertical integration without the additional fixed cost structure. This creates margin opportunities, system efficiencies and benefits from network effects in matching these ecosystem participants.

Strategic Partnerships

Our strategic partnerships encompass relationships with new market entrants not previously engaged in solar, including cable, consumer marketing, retail and specialized energy retail companies. Our strategic partners find the residential solar market attractive, but recognize that significant barriers to entry make partnerships the preferred method to reach solar customers. Through these strategic arrangements, we typically market our solar service offerings to the strategic partner’s customer base and install the solar energy systems directly or through one of our solar partners. We manage the customer experience and retain the value of the economic relationship through the term of the homeowner’s contract and potential renewal period. We have executed strategic partnerships in competitive processes that give us access to millions of potential customers. As our industry grows, we believe that our unique platform and deep partnership experience position us to be the partner of choice for new market entrants. We believe that these broad strategic relationships will help us drive down our customer acquisition costs and make solar accessible to even more homeowners.
The combination of direct-to-consumer, solar partnerships and strategic partnerships offers distinct advantages. The direct-to-consumer channel allows us to scale rapidly, drive incremental unit costs down over the long term, and refine operational processes to share with our partners. Our solar partnerships and strategic partnerships enable nimble market entry and exit, while allowing for capital efficient growth. Together, this multi-channel strategy supported by our open platform allows us to reach more customers with our leading solar service without compromising our ability to provide exceptional customer service.

Customer Agreements

Since we were founded in 2007, we have been providing solar energy to residential customers at prices typically below utility rates through a variety of offerings, most commonly through our leases and power purchase agreements which we refer to as our “Customer Agreements.” Under our Customer Agreements, customers have the right to use and consume all electricity produced by the solar energy system, on a continuous basis. Most Customer Agreements entitle the customer to a refund for underproduction below a guaranteed amount, which we refer to as our “performance guarantee.” Either directly or through a solar partner, we construct a solar energy system on a customer’s home which generates electricity at set prices through Customer Agreements which typically have an initial term of 20 or 25 years. Rates for both forms of our Customer Agreements can be fixed for the duration of the contract or escalated at a pre-determined percentage annually. Upon installation, a system is interconnected to the local utility grid. The home’s energy usage is provided by the solar energy system with any additional energy needs provided by the local utility. Any excess solar energy, including amounts in excess of battery storage, that is not immediately used by our customers is exported to the utility grid using a bi-directional utility net meter, and the customer generally receives a credit for this excess power from their utility to offset future usage of utility-generated energy.

Although many of our homeowners choose to pay little-to-nothing upfront and instead receive a monthly bill, some customers choose to prepay an amount upfront, thereby reducing their monthly bill. The amount of an upfront payment is customized for each customer and currently ranges from $0 to $10,000 for customers paying monthly. Customers may also choose to fully prepay their 20 or 25-year contracts, and the average cost of these prepaid contracts is approximately $17,000. The prepayment amount is based on the estimated amount of the solar energy system’s output over the typically 20 or 25-year term of the Customer Agreement. If the estimated production of the solar energy system is less than the actual production for a given year after the first full one to two years of the agreement, prepaid customers are refunded the difference at the end of each such year. If the solar energy system’s energy production is in excess of the estimate, we allow customers to keep the excess energy at no charge. After the initial term of the Customer Agreement, customers have the option to renew their contracts for the remaining life of the solar energy system, typically at a 10% discount to then-prevailing power prices, to purchase the system from us at its fair market value, or have us remove the system.

Regardless of the type of Customer Agreement our customers choose, we operate the system and agree to monitor and maintain it in good condition at no cost to the customer. We offer an industry-leading performance guarantee to ensure that our customers are receiving the energy they expect at the price they expect. Our customers also receive up to a ten-year warranty for roof penetrations.

If a customer sells his or her home, the customer has the right to purchase the system or assign the Customer Agreement to the new homeowner, provided the new homeowner meets our credit requirements and agrees to be bound by the terms and conditions of the Customer Agreement. In connection with this service transfer, the customer may prepay all or a portion of the remaining payments due under the Customer Agreement to lower or eliminate the monthly rate to be paid by the new homeowner. If the customer fails to purchase the system or assign the Customer Agreement to a new homeowner, we may negotiate directly with the new homeowner to transfer the Customer Agreement (at times on modified terms) and/or look to the original customer to pay all remaining payments due. We have completed thousands of service transfers and, from inception through December 31, 2018, the aggregate expected net present value of the Customer Agreements once assigned represented approximately 100% of what it was prior to assignment.
Sales and Marketing

We sell our solar energy offerings through a scalable sales organization using both a direct-to-consumer approach across online, retail, mass media, digital media, canvassing, field marketing and referral channels as well as our diverse partner network. We sell to homeowners over the phone, online, in the field through canvassing and in-home sales and through our strategic retail sales partnerships. We also partner with sales-only organizations that focus on direct-to-consumer marketing and sales on our behalf, typically with a Sunrun-branded offering at point of sale, which further increases our brand and reach. We believe that a customized, homeowner-focused selling process is important before, during and after the sale of our solar services.

We train our sales team to customize their consultative presentation to the individual homeowner based on guidelines and principles outlined in our training materials. We are able to provide our sales team with real-time data and pricing tools through our proprietary technology which is designed to generate a tailored product offering with optimized pricing based on the actual characteristics of a homeowner’s home, including roof characteristics and shading, as well as actual energy usage. This allows our sales team to differentially price homes in the same geographic region quickly and effectively.

Supply Chain

We purchase equipment, including solar panels, inverters and batteries from a limited number of manufacturers and suppliers. If we fail to maintain or expand our relationships with these suppliers and manufacturers, or if one or more that we rely upon to meet anticipated demand reduces or ceases production, it may be difficult to quickly identify and qualify alternatives on acceptable terms. In addition, equipment prices may increase in the coming years, or not decrease at the rates we historically have experienced, due to tariffs or other factors. As discussed in Item 1A. Risk Factors - "We have historically benefited from declining costs in our industry, and our business and financial results may be harmed not only as a result of any increases in costs associated with our solar service offerings but also any failure of these costs to continue to decline as we currently expect. If we do not reduce our cost structure in the future, our ability to continue to be profitable may be impaired." tariffs on both solar modules and inverters were imposed in 2018. While these tariffs did not have a material negative impact on our business in 2018, we believe the tariffs were a contributing factor to smaller decreases to equipment costs than we would have otherwise experienced in the year.

Competition

We believe that our primary competitors are the traditional utilities that supply electricity to our potential customers. We compete with these traditional utilities primarily based on price (cents per kilowatt hour), predictability of future prices (by providing pre-determined annual price escalations), the backup power capabilities of our Brightbox™ battery storage solution and the ease by which homeowners can switch to electricity generated by our solar energy systems.

We also compete with companies that are not regulated like traditional utilities but that have access to the traditional utility electricity transmission and distribution infrastructure pursuant to state and local pro-competitive and consumer choice policies and with solar companies with business models that are similar to ours. We believe that we compete favorably with these companies based on our unique multi-channel approach and differentiated customer experience.

We also face competition from purely finance-driven organizations that acquire customers and then subcontract out the installation of solar energy systems, from installation businesses that seek financing from external parties, from large construction companies and utilities and from sophisticated electrical and roofing companies.

Intellectual Property

As of December 31, 2018, we had 22 issued patents and 17 filed patent applications in the United States and foreign countries relating to a variety of aspects of our solar solutions. Our issued U.S. patents will expire 20 years from their respective filing dates, with the earliest expiring in 2029. We intend to file additional patent applications as we continue to innovate through our research and development efforts.
Government Regulation

Although we are not regulated as a public utility in the United States under applicable national, state or other local regulatory regimes where we conduct business, we compete primarily with regulated utilities. As a result, we have developed and are committed to maintaining a policy team to focus on the key regulatory and legislative issues impacting the entire industry. We believe these efforts help us better navigate local markets through relationships with key stakeholders and facilitate a deep understanding of the national and regional policy environment.

To operate our systems, we obtain interconnection permission from the applicable local primary electric utility. Depending on the size of the solar energy system and local law requirements, interconnection permission is provided by the local utility directly to us and/or our homeowners. In almost all cases, interconnection permissions are issued on the basis of a standard process that has been pre-approved by the local public utility commission or other regulatory body with jurisdiction over net metering policies. As such, no additional regulatory approvals are required once interconnection permission is given.

Our operations are subject to stringent and complex federal, state and local laws, including regulations governing the occupational health and safety of our employees and wage regulations. For example, we are subject to the requirements of the federal Occupational Safety and Health Act, as amended (“OSHA”), the U.S. Department of Transportation (“DOT”), and comparable state laws that protect and regulate employee health and safety. We endeavor to maintain compliance with applicable DOT, OSHA and other comparable government regulations. However, we have in the past experienced workplace accidents and received citations from regulators resulting in fines, as discussed in Item 1A. Risk Factors: “Compliance with occupational safety and health requirements and best practices can be costly, and noncompliance with such requirements may result in potentially significant monetary penalties, operational delays and adverse publicity.” These incidents have not had a material impact on our business or our relations with our employees.

Government Incentives

Federal, state and local government bodies provide incentives to owners, distributors, system integrators and manufacturers of solar energy systems to promote solar energy in the form of rebates, tax credits, payments for renewable energy credits associated with renewable energy generation and exclusion of solar energy systems from property tax assessments. These incentives enable us to lower the price we charge homeowners for energy from, and to lease, our solar energy systems, helping to catalyze homeowner acceptance of solar energy as an alternative to utility-provided power.

The federal government currently offers a 30% investment tax credit (“Commercial ITC”) under Section 48(a) of the Internal Revenue Code of 1986, as amended (the “Code”), for the installation of certain solar power facilities owned for business purposes. The depreciable basis of a solar facility is also reduced by 50% of the tax credit claimed. Similarly, the federal government currently offers a 30% investment tax credit under Section 25D of the Internal Revenue Code (“Residential ITC”), for the installation of certain solar power facilities owned by residential taxpayers, which is applicable to homeowners who purchase a solar system outright as opposed to entering into a Customer Agreement. Both the Residential ITC and the Commercial ITC will step down to 26% for solar property commencing construction in 2020, then down to 22% for solar property commencing construction in 2021. The Residential ITC will expire after 2021 and the Commercial ITC will step down to 10% for both (i) solar property commencing construction after 2021 and (ii) solar property that commenced construction during or prior to 2021 but is placed in service after 2023.

More than half of the states, and many local jurisdictions, have established property tax incentives for renewable energy systems that include exemptions, exclusions, abatements and credits. Many states also have adopted procurement requirements for renewable energy, and in 2018 the California Energy Commission and California Building Standards Commission approved a standard for newly constructed single-family and multifamily residences up to three stories tall to be solar-powered beginning in 2020. Twenty-nine states and the District of Columbia have adopted a renewable portfolio standard (and nine other states have some voluntary goal) that requires regulated utilities to procure a specified percentage of total electricity delivered in the state from eligible renewable energy sources, such as solar energy systems, by a specified date. To prove compliance with such mandates, utilities must surrender solar renewable energy credits (“SRECs”) to the applicable authority. Solar energy system owners such as our investment funds often are able to sell SRECs to utilities directly or in SREC markets.
While there are numerous federal, state and local government incentives that benefit our business, some adverse interpretations or determinations of new and existing laws can have a negative impact on our business. For example, in the state of Arizona, the Arizona Department of Revenue and Arizona counties have determined that a personal property tax exemption on solar panels does not apply to solar panels that are leased (as opposed to owned), and has subjected our leased solar panels to personal property taxes. While we are challenging that determination, an adverse outcome will subject us and other solar companies to an increase in personal property taxes. If we pass this additional tax on to our customers in the form of higher prices, it could reduce or eliminate entirely any savings that these solar panels might otherwise provide to the customer. Although we are involved in ongoing litigation challenging the Arizona personal property tax determination, there can be no assurances that these litigation matters will be resolved in a manner that is favorable to us or other solar companies. If these litigation matters are not resolved favorably, it will adversely impact our operations in Arizona, and if we decide to pass the tax cost on to our customers, the price increase could adversely impact our ability to attract new customers in Arizona.

Employees

As of December 31, 2018, we had approximately 4,400 employees. We also engage independent contractors and consultants. None of our employees are covered by collective bargaining agreements. We have not experienced any work stoppages.

Corporate Information

Our principal executive offices are located at 595 Market Street, 29th Floor, San Francisco, California 94105, and our telephone number is (415) 580-6900. Our website address is www.sunrun.com. Information contained on, or that can be accessed through, our website does not constitute part of this Annual Report on Form 10-K and inclusions of our website address in this Annual Report on Form 10-K are inactive textual references only. We were formed in 2007 as a California limited liability company, and converted in 2008 into a Delaware corporation.

The Sunrun design logo, “Sunrun” and our other registered or common law trademarks, service marks or trade names appearing in this Annual Report on Form 10-K are the property of Sunrun Inc. Other trademarks and trade names referred to in this Annual Report on Form 10-K are the property of their respective owners.

Available Information

We file annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and amendments to reports filed or furnished pursuant to Sections 13(a) and 15(d) of the Exchange Act. The SEC maintains a website at www.sec.gov that contains reports, proxy and information statements and other information that we file with the SEC electronically. Copies of our reports on Form 10-K, Forms 10-Q, Forms 8-K, and amendments to those reports may also be obtained, free of charge, electronically on the investor relations page on our website located at investors.sunrun.com as soon as reasonably practical after we file such material with, or furnish it to, the SEC.

We also use the investor relations page on our website as a channel of distribution for important company information. Important information, including press releases, analyst presentations and financial information regarding us, as well as corporate governance information, is routinely posted and accessible on the investor relations page on our website. Information on or that can be accessed through our website is not part of this Annual Report on Form 10-K, and the inclusion of our website address is an inactive textual reference only.
Item 1A. Risk Factors.

Investing in our common stock involves a high degree of risk. You should carefully consider the risks and uncertainties described below, together with all of the other information in this Annual Report on Form 10-K, including the section titled “Management’s Discussion and Analysis of Financial Condition and Results of Operations” and our consolidated financial statements and related notes, before making a decision to invest in our common stock. The risks and uncertainties described below may not be the only ones we face. If any of the risks actually occur, our business, financial condition, results of operations, cash flows and prospects could be materially and adversely affected. In that event, the market price of our common stock could decline, and you could lose part or all of your investment.

Risks Related to Our Business and Our Industry

We need to raise capital to finance the continued growth of our residential solar service business. If capital is not available to us on acceptable terms, as and when needed, our business and prospects would be materially and adversely impacted. In addition, our business is affected by general economic conditions and related uncertainties affecting markets in which we operate. Volatility in current economic conditions could adversely impact our business, including our ability to raise financing.

Our future success depends on our ability to raise capital from third parties to grow our business. To date, we have funded our business principally through low-cost tax equity investment funds. If we are unable to establish new investment funds when needed, or upon desirable terms, the growth of our solar service business would be impaired. Changes in tax law could affect our ability to establish such tax equity investment funds, impact the terms of existing or future funds, or reduce the pool of capital available for us to grow our business.

The contract terms in certain of our existing investment fund documents contain various conditions with respect to our ability to draw on financing commitments from the fund investors, including conditions that restrict our ability to draw on such commitments if an event occurs that could reasonably be expected to have a material adverse effect on the fund or, in some instances, us. If we are not able to satisfy such conditions due to events related to our business, a specific investment fund, developments in our industry, including tax or regulatory changes, or otherwise, and as a result, we are unable to draw on existing funding commitments, we could experience a material adverse effect on our business, liquidity, financial condition, results of operations and prospects. If any of the investors that currently invest in our investment funds decide not to invest in future investment funds to finance our solar service offerings due to general market conditions, concerns about our business or prospects or any other reason, or materially change the terms under which they are willing to provide future financing, we would need to identify new investors to invest in our investment funds and our cost of capital may increase.

In addition, our business and results of operations are materially affected by conditions in the global capital markets and the economy. A general slowdown or volatility in current economic conditions, stemming from the level of U.S. national debt, currency fluctuations, unemployment rates, the availability and cost of credit, the U.S. housing market, inflation levels, interest rates, energy costs and concerns over a slowing economy, could adversely affect our business, including our ability to raise financing.

There can be no assurance that we will be able to continue to successfully access capital in a manner that supports the growth of our business. Certain sources of capital may not be available in the future, and competition for any available funding may increase. We cannot be sure that we will be able to maintain necessary levels of funding without incurring high funding costs, unfavorable changes in the terms of funding instruments or the liquidation of certain assets. If we are unable to continue to offer a competitive investment profile, we may lose access to these funds or they may only be available on less favorable terms than those provided to our competitors or currently provided to us. If we are unable to arrange new or alternative methods of financing on favorable terms, our business, liquidity, financial condition, results of operations and prospects could be materially and adversely affected.
Rising interest rates will adversely impact our business.

Rising interest rates may increase our cost of capital. Our future success depends on our ability to raise capital from fund investors and obtain secured lending to help finance the deployment of our solar service offerings. Part of our business strategy is to seek to reduce our cost of capital through these arrangements to improve our margins, offset future reductions in government incentives and maintain the price competitiveness of our solar service offerings. Rising interest rates may have an adverse impact on our ability to offer attractive pricing on our solar service offerings to homeowners, which could impact the sales of our solar energy offerings.

The majority of our cash flows to date have been from solar service offerings under Customer Agreements that have been monetized under various investment fund structures. One of the components of this monetization is the present value of the payment streams from homeowners who enter into these Customer Agreements. If the rate of return required by capital providers, including debt providers, rises as a result of a rise in interest rates, it will reduce the present value of the homeowner payment stream and consequently reduce the total value derived from this monetization. Any measures that we could take to mitigate the impact of rising interest rates on our ability to secure third-party financing could ultimately have an adverse impact on the value proposition that we offer homeowners.

The solar energy industry is an emerging market that is constantly evolving and may not develop to the size or at the rate we expect.

The solar energy industry is an emerging and constantly evolving market opportunity. We believe the solar energy industry will still take several years to fully develop and mature, and we cannot be certain that the market will grow to the size or at the rate we expect. For example, we have experienced increases in cancellations of our Customer Agreements in certain geographic markets during certain periods in our operating history. Any future growth of the solar energy market and the success of our solar service offerings depend on many factors beyond our control, including recognition and acceptance of the solar service market by consumers, the pricing of alternative sources of energy, a favorable regulatory environment, the continuation of expected tax benefits and other incentives and our ability to provide our solar service offerings cost-effectively. If the markets for solar energy do not develop to the size or at the rate we expect, our business may be adversely affected.

Solar energy has yet to achieve broad market acceptance and depends in part on continued support in the form of rebates, tax credits and other incentives from federal, state and local governments. If this support diminishes, our ability to obtain external financing on acceptable terms, or at all, could be materially adversely affected. These types of funding limitations could lead to inadequate financing support for the anticipated growth in our business. Furthermore, growth in residential solar energy depends in part on macroeconomic conditions, retail prices of electricity and homeowner preferences, each of which can change quickly. Declining macroeconomic conditions, including in the job markets and residential real estate markets, could contribute to instability and uncertainty among homeowners and impact their financial wherewithal, credit scores or interest in entering into long-term contracts, even if such contracts would generate immediate and long-term savings.

Market prices of retail electricity generated by utilities or other energy sources could decline for a variety of reasons, as discussed further below. Any such declines in macroeconomic conditions or changes in homeowner preferences would adversely impact our business.

Our ability to provide our solar service offerings to homeowners on an economically viable basis depends in part on our ability to finance these systems with fund investors who seek particular tax and other benefits.

Our solar service offerings have been eligible for federal investment tax credits ("ITCs"), U.S. Treasury grants and other tax benefits. We have relied on, and will continue to rely on, tax equity investment funds, which are financing structures that monetize a substantial portion of those benefits, in order to finance our solar service offerings. If, for any reason, we are unable to continue to monetize those benefits through these arrangements, we may be unable to provide and maintain our solar service offerings for homeowners on an economically viable basis.

The availability of this tax-advantaged financing depends upon many factors, including:

our ability to compete with other solar energy companies for the limited number of potential fund investors, each of which has limited funds and limited appetite for the tax benefits associated with these financings;

• the state of financial and credit markets;

• changes in the legal or tax risks associated with these financings; and

• non-renewal of these incentives or decreases in the associated benefits (including the anticipated step-down of the Commercial ITC described below).

The federal government currently offers a 30% ITC (the “Commercial ITC”) under Section 48(a) of the Internal Revenue Code of 1986, as amended (the “Code”), for the installation of certain solar power facilities owned for business purposes. The depreciable basis of a solar facility is also reduced by 50% of the tax credit claimed. Similarly, the federal government currently offers a 30% investment tax credit (“Residential ITC”) for the installation of certain solar power facilities owned by residential taxpayers. The Residential ITC and the Commercial ITC will step down to 26% for solar property commencing construction in 2020, then down to 22% for solar property commencing construction in 2021, with the Residential ITC expiring after 2021 and the Commercial ITC further stepping down to 10% for both (i) solar property commencing construction after 2021 and (ii) solar property that commenced construction during or prior to 2021 but is placed in service after 2023.

Potential investors must remain satisfied that the funding structures that we offer will make the tax benefits associated with solar energy systems available to these investors, which depends on the investors’ assessment of the tax law, the absence of any unfavorable interpretations of that law and the continued application of existing tax law and interpretations to our funding structures. Changes in existing law or interpretations of existing law by the Internal Revenue Service (the “IRS”) and the courts could reduce the willingness of investors to invest in funds associated with these solar energy systems. Moreover, corporate tax rate reductions could reduce the appetite for tax benefits overall, which could reduce the pool of available funds. Additionally, certain tax deductions, such as depreciation, will have less value to investors, requiring additional cash to be paid to investors to meet return demands. Accordingly, we cannot assure you that this type of financing will continue to be available to us. New investment fund structures or other financing mechanisms may also become available, and if we are unable to take advantage of these fund structures and financing mechanisms, we may be at a competitive disadvantage. If, for any reason, we are unable to finance our solar service offerings through tax-advantaged structures or if we are unable to realize or monetize Commercial ITCs or other tax benefits, we may no longer be able to provide our solar service offerings to new homeowners on an economically viable basis, which would have a material adverse effect on our business, financial condition and results of operations.

If the Internal Revenue Service makes determinations that the fair market value of our solar energy systems is materially lower than what we have claimed, we may have to pay significant amounts to our fund investors and our business, financial condition and prospects may be materially and adversely affected.

We and our fund investors claim the Commercial ITC or the U.S. Treasury grant in amounts based on the fair market value of our solar energy systems. We have obtained independent appraisals to determine the fair market values we report for claiming Commercial ITCs and U.S. Treasury grants. The IRS reviews these fair market values. With respect to U.S. Treasury grants, the U.S. Treasury Department reviews the reported fair market value in determining the amount initially awarded, and the IRS may also subsequently audit the fair market value and determine that amounts previously awarded constitute taxable income for U.S. federal income tax purposes. With respect to Commercial ITCs, the IRS may review the fair market value on audit and determine that the tax credits previously claimed must be reduced. If the fair market value is determined in these circumstances to be less than what we reported, we may owe our fund investors an amount equal to this difference, plus any costs and expenses associated with a challenge to that valuation. We could also be subject to tax liabilities, including interest and penalties. If the IRS further disagrees now or in the future with the amounts we reported regarding the fair market value of our solar energy systems, it could have a material adverse effect on our business, financial condition and prospects. One of our investment funds has been selected for audit by the IRS. In addition, three of our investors are currently being audited by the IRS, and these investor audits involve a review of the fair market value determination of our solar energy systems. If these investor audits result in an adverse finding, we may be subject to an indemnity obligation to these investors. Since we cannot determine how the IRS will evaluate system values used in claiming ITCs, we are unable to reliably estimate the maximum potential future payments that we would have to make under this obligation as of each balance sheet date. We purchased an insurance policy in 2018 insuring us and related parties for additional taxes owed in respect of lost ITCs, gross-up costs and expenses incurred in defending the types of claims described above. However, this policy only covers certain investment

11
funds and has negotiated exclusions from, and limitations to, coverage and therefore may not cover us for all such lost ITC, taxes, costs and expenses.

We have historically benefited from declining costs in our industry, and our business and financial results may be harmed not only as a result of any increases in costs associated with our solar service offerings but also any failure of these costs to continue to decline as we currently expect. If we do not reduce our cost structure in the future, our ability to continue to be profitable may be impaired.

Declining costs related to raw materials, manufacturing and the sale and installation of our solar service offerings have been a key driver in the pricing of our solar service offerings and, more broadly, homeowner adoption of solar energy. While historically the prices of solar panels and raw materials have declined, the cost of solar panels and raw materials could increase in the future, and such products' availability could decrease, due to a variety of factors, including tariffs and trade barriers, export regulations, regulatory or contractual limitations, industry market requirements and changes in technology and industry standards.

For example, in the past, we and our solar partners purchased a significant portion of the solar panels used in our solar service offerings from manufacturers based in China or containing components from China. In January 2018, in response to a petition filed under Section 201 of the Trade Act of 1974, the President imposed four-year tariffs on imported solar modules and imported solar cells not assembled into other products (the "Section 201 Module Tariffs") that apply to all imports above a 2.5 gigawatts (GW) annual threshold. The Section 201 Module Tariffs were 30% in 2018, and step down 5% annually in the second, third and fourth years. In September 2018, the U.S. Trade Representative ("USTR") granted SunPower Corporation ("SunPower") an exemption, making SunPower a domestic solar panel manufacturer that is not subject to the Section 201 Module Tariffs. This could give SunPower, which offers home solar service offerings using its own panels a cost advantage over competitors like us that rely, in part, on imported solar panels that are currently subject to these tariffs.

The United States and China each imposed additional new tariffs in 2018 on various products imported from the other country. These include an additional 25% tariff on solar panels and cells that are manufactured in China and a tariff on inverters, certain batteries and other electrical equipment initially set at 10% and expected to increase to 25% in 2019. The United States also has, from time to time, announced potential tariffs on goods imported from other countries. We cannot predict what actions may ultimately be taken with respect to tariffs or trade relations between the United States and other countries, what products may be subject to such actions, or what actions may be taken by the other countries in retaliation. The tariffs described above, the adoption and expansion of trade restrictions, the occurrence of a trade war, or other governmental action related to tariffs, trade agreements or related policies has the potential to adversely impact our supply chain and access to equipment, our costs and ability to economically serve certain markets. Any such cost increases or decreases in availability could slow our growth and cause our financial results and operational metrics to suffer.

Other factors may also impact costs, such as our choice to make significant investments to drive growth in the future.

We rely on net metering and related policies to offer competitive pricing to homeowners in all of our current markets, and changes to such policies may significantly reduce demand for electricity from our solar service offerings.

As of December 31, 2018, a substantial majority of states have adopted net metering policies. Net metering policies are designed to allow homeowners to serve their own load using on-site energy generation. Electricity that is generated by a solar energy system and consumed on-site avoids a retail energy purchase from the applicable utility, and excess electricity that is exported back to the electric grid generates a retail credit within a homeowner’s monthly billing period. At the end of the monthly billing period, if the homeowner has generated excess electricity within that month, the homeowner typically carries forward a credit for any excess electricity to be offset against future utility energy purchases. At the end of an annual billing period or calendar year, utilities either continue to carry forward a credit, or reconcile the homeowner’s final annual or calendar year bill using different rates (including zero credit) for the exported electricity.
Utilities, their trade associations, and fossil fuel interests in the country are currently challenging net metering policies, and seeking to eliminate them, cap them, or impose charges on homeowners that have net metering. For example, in October 2015 the Hawaii Public Utilities Commission (the “Hawaii Commission”) issued an order that eliminates net metering for all new customers. All existing net metering customers and customers who submitted net metering applications before October 12, 2015 are grandfathered indefinitely under the old rules. Some interim programs created by the Hawaii Commission are grandfathered for customers who applied in a timely fashion. We continue to build and service these systems.

In addition, in early 2016 we ceased new installations in Nevada in response to the elimination of net metering by the Public Utilities Commission of Nevada (“PUCN”). However, in September 2016, the PUCN issued an order grandfathering in customers under the prior net metering rules who had installed a solar energy system or had submitted a net metering application prior to December 31, 2015. Furthermore, in June 2017, the governor of Nevada signed legislation, AB 405, which restores net metering at a reduced credit and grandfathers new customers for 20 years at the net metering rate in effect at the time they apply for interconnection. As another example, in December 2016, the Arizona Corporation Commission (“ACC”) issued a decision to eliminate net metering export rates for new solar customers. In May 2018, the governor of Connecticut signed legislation to end the state’s existing net metering program upon the conclusion of the Residential Solar Incentive Program (currently expected in 2019) and replace it with two yet-to-be-determined rate structures.

Some states set limits on the total percentage of a utility’s customers that can adopt net metering. For example, South Carolina has a net metering cap and customers within Duke Energy Carolinas’ territory are expected to reach their cap on March 15, 2019. If not increased or otherwise extended, the net metering cap is also expected to be reached in South Carolina Electric & Gas’ territory in 2019. New York and New Jersey currently have no net metering cap; however, these states have caps that trigger commission review of net metering policies. These policies could be subject to change in the future, and other states we serve now or in the future may adopt net metering caps. If the net metering caps in these jurisdictions are reached without an extension of net metering policies, homeowners in the future will not have access to the economic value proposition net metering provides. Our ability to sell our solar service offerings may be adversely impacted by the failure to extend existing limits to net metering or the elimination of currently existing net metering policies. The failure to adopt a net metering policy where it currently is not in place would pose a barrier to entry in those states. Additionally, the imposition of charges that only or disproportionately impact homeowners that have solar systems, or the introduction of rate designs mentioned above, would adversely impact our business.

Electric utility statutes and regulations and changes to statutes or regulations may present technical, regulatory and economic barriers to the purchase and use of our solar service offerings that may significantly reduce demand for such offerings.

Federal, state and local government statutes and regulations concerning electricity heavily influence the market for our solar service offerings. These statutes and regulations relate to electricity pricing, net metering, incentives, taxation, competition with utilities, and the interconnection of homeowner-owned and third party-owned solar energy systems to the electrical grid. These statutes and regulations are constantly evolving. Governments, often acting through state utility or public service commissions, change and adopt different rates for residential customers on a regular basis and these changes can have a negative impact on our ability to deliver savings to homeowners.

Utilities, their trade associations, and fossil fuel interests in the country, each of which has significantly greater economic and political resources than the residential solar industry, are currently challenging solar-related policies to reduce the competitiveness of residential solar energy. Any adverse changes in solar-related policies could have a negative impact on our business and prospects.

We face competition from traditional energy companies as well as solar energy companies.
The solar energy industry is highly competitive and continually evolving as participants strive to distinguish themselves within their markets and compete with large utilities. We believe that our primary competitors are the established utilities that supply energy to homeowners by traditional means. We compete with these utilities primarily based on price, predictability of price, and the ease by which homeowners can switch to electricity generated by our solar service offerings. If we cannot offer compelling value to homeowners based on these factors, then our business and revenue will not grow. Utilities generally have substantially greater financial, technical, operational and other resources than we do. As a result of their greater size, these competitors may be able to devote more resources to the research, development, promotion and sale of their products or respond more quickly to evolving industry standards and changes in market conditions than we can. Furthermore, these competitors are able to devote substantially more resources and funding to regulatory and lobbying efforts.

Utilities could also offer other value-added products or services that could help them compete with us even if the cost of electricity they offer is higher than ours. In addition, a majority of utilities’ sources of electricity are non-solar, which may allow utilities to sell electricity more cheaply than we can. Moreover, regulated utilities are increasingly seeking approval to “rate-base” their own residential solar and storage businesses. Rate-basing means that utilities would receive guaranteed rates of return for their solar and storage businesses. This is already commonplace for utility scale solar projects and commercial solar projects. While few utilities to date have received regulatory permission to rate-base residential solar or storage, our competitiveness would be significantly harmed should more utilities receive such permission because we do not receive guaranteed profits for our solar service offerings.

We face competition from other residential solar service providers. Some of these competitors have a higher degree of brand name recognition, differing business and pricing strategies, and greater capital resources than we have, as well as extensive knowledge of our target markets. If we are unable to establish or maintain a consumer brand that resonates with homeowners, or competes with the pricing offered by our competitors, our sales and market share position may be adversely affected, as our growth is dependent on originating new homeowners. We may also face competitive pressure from companies who offer lower priced consumer offerings than we do.

We compete with companies that are not regulated like traditional utilities but that have access to the traditional utility electricity transmission and distribution infrastructure. These energy service companies are able to offer homeowners electricity supply-only solutions that are competitive with our solar service offerings on both price and usage of solar energy technology while avoiding the long-term agreements and physical installations that our current fund-financed business model requires. This may limit our ability to attract homeowners, particularly those who wish to avoid long-term contracts or have an aesthetic or other objection to putting solar panels on their roofs.

We face competition from purely finance-driven nonintegrated competitors that subcontract out the installation of solar energy systems, from installation businesses (including solar partners) that seek financing from external parties, from large construction companies and from electrical and roofing companies. In addition, local installers that might otherwise be viewed as potential solar partners may gain market share by being able to be the first providers in new local markets. Some of these competitors may provide energy at lower costs than we do. Finally, as declining prices for solar panels and related equipment has resulted in an increase in consumers purchasing instead of leasing solar energy systems, we face competition from companies that offer consumer loans for these solar panel purchases.

As the solar industry grows and evolves, we will continue to face existing competitors as well as new competitors who are not currently in the market (including those resulting from the consolidation of existing competitors) that achieve significant developments in alternative technologies or new products such as storage solutions, loan products or other programs related to third-party ownership. Our failure to adapt to changing market conditions, to compete successfully with existing or new competitors and to adopt new or enhanced technologies could limit our growth and have a material adverse effect on our business and prospects.

Regulations and policies related to rate design could deter potential homeowners from purchasing our solar service offerings, reduce the value of the electricity our systems produce, and reduce any savings that our homeowners could realize from our solar service offerings.

All states regulate investor-owned utility retail electricity pricing. In addition, there are numerous publicly owned utilities and electric cooperatives that establish their own retail electricity pricing through some form of regulation or internal process. These regulations and policies could deter potential homeowners from purchasing our solar service offerings. For example, some utilities in states such as Arizona and Utah have sought and secured
rate design changes that reduce credit for residential solar exports to below the retail rate and impose new charges for rooftop solar customers. Utilities in additional states may follow suit. Such rate changes can include changing rates to charge lower volume-based rates – the rates charged for kilowatt hours of electricity purchased by a residential customer – raising unavoidable fixed charges that a homeowner is subject to when they purchase solar energy from third parties, and levying charges on homeowners based on their point of maximum demand during a month (referred to as "demand charge"). For example, Arizona Public Service Company offers residential demand charge rate plans and if our solar customers have subscribed to those plans, they may not realize typical savings. These forms of rate design would adversely impact our business by reducing the value of the electricity our solar energy systems produce and reducing any savings homeowners realize by purchasing our solar service offerings. These proposals could continue or be replicated in other states. In addition to changes in general rates charged to all residential customers, utilities are increasingly seeking solar-specific charges (which may be fixed charges, capacity-based charges, or other rate charges). Any of these changes could materially reduce the demand for our offerings and could limit the number of markets in which our offerings are competitive with electricity provided by the utilities.

Our business currently depends on the availability of utility rebates, tax credits, tax exemptions and other financial incentives in addition to other tax benefits. The expiration, elimination or reduction of these rebates and incentives could adversely impact our business.

Our business depends on government policies that promote and support solar energy and enhance the economic viability of owning solar energy systems. U.S. federal, state and local governmental bodies provide incentives to owners, distributors, installers and manufacturers of solar energy systems to promote solar energy. These incentives include ITCs, as discussed above, as well as other tax credits, rebates and SRECs associated with solar energy generation. Some markets, such as New Jersey and Massachusetts, currently utilize SRECs. SRECs can be volatile and could decrease over time as the supply of SREC-producing solar energy systems installed in a particular market increases. For example, in New Jersey, because of the substantial supply of solar energy systems installed, the state was on the cusp of reaching the solar carve-out under the state's Renewable Portfolio Standard. In May 2018, the governor of New Jersey signed legislation to expand New Jersey's solar carve-out to 5.1% of kilowatt hours of electricity sold in the state through 2021. We rely on these incentives to lower our cost of capital and to attract investors, all of which enable us to lower the price we charge homeowners for our solar service offerings. These incentives have had a significant impact on the development of solar energy but they could change at any time, especially in light of the recent change in administration, as further described below. These incentives may also expire on a particular date (as discussed above with respect to the ITC), and when the allocated funding is exhausted, or be reduced, terminated or repealed without notice. The financial value of certain incentives may also decrease over time.

The current administration’s proposed environmental policies may create regulatory uncertainty in the solar energy industry and may lead to a reduction or removal of various clean energy programs and initiatives designed to curtail climate change. Such a reduction or removal of incentives could diminish the market for solar energy. Tax legislation known as the Tax Cuts and Jobs Act ("Tax Act") was enacted in December 2017, reducing the corporate tax rate to 21%, and limiting interest deductibility and allowing full and immediate expensing of capital costs. A reduction in the corporate tax rate and the expensing of capital costs could diminish the capacity of potential fund investors to benefit from tax incentives, and could require additional cash to be distributed to such fund investors in lieu of tax benefits. Furthermore, the current administration has made public statements regarding overturning or modifying policies of, or regulations enacted by, the prior administration that placed limitations on coal and gas electric generation, mining and/or exploration. Any effort to overturn federal and state laws, regulations or policies that are supportive of solar energy generation or that remove costs or other limitations on other types of energy generation that compete with solar energy projects could materially and adversely affect our business.

Our business model also relies on multiple tax exemptions offered at the state and local levels. For example, solar energy systems are generally not considered in determining values for calculation of local and state real and personal property taxes as a result of applicable property tax exemptions. State and local tax exemptions can be changed by state legislatures and other regulators, and if solar energy systems were not exempt from such taxes, the property taxes payable by homeowners would be higher, which could offset any potential savings our solar service offerings could offer. Similarly, if state or local legislatures impose property taxes on third-party owners of solar systems, solar companies like us would be subject to higher costs. For example, the Arizona Department of Revenue and Arizona counties have subjected our leased solar panels to personal property taxes in that state. While we are challenging that determination, an adverse outcome will subject us and other solar companies to an increase in personal property taxes. If we pass this additional tax on to our customers in the form of higher prices, it
could reduce or eliminate entirely any savings that these solar panels might otherwise provide to the homeowner. We are involved in ongoing litigation challenging the Arizona personal property tax determination. There can be no assurances that this litigation will be resolved in a manner that is favorable to us or other solar companies. If this litigation is not resolved in a manner that is favorable to us and other solar companies, it will adversely impact our operations in Arizona. If we decide to pass the tax cost on to our customers, such price increase could adversely impact our ability to attract new customers in Arizona, and any savings that our current Arizona customers realize could be reduced or eliminated by the additional tax imposed, which will make our solar service offerings less attractive to those customers and could increase the risk of default from those customers. In addition, South Carolina counties do not currently assess property tax on customer-owned residential solar energy systems, however; third-party-owned systems are subject to business personal property taxes. In Connecticut, a number of municipalities have assessed property tax on third-party owned solar energy systems, despite an applicable exemption under state law. In general, we rely on certain state and local tax exemptions that apply to the sale of equipment, sale of power, or both. These state and local tax exemptions can be changed by the state legislature and other regulators and such a change could adversely impact our business.

We are not currently regulated as a utility under applicable laws, but we may be subject to regulation as a utility in the future or become subject to new federal and state regulations for any additional solar service offerings we may introduce in the future.

Most federal, state, and municipal laws do not currently regulate us as a utility. As a result, we are not subject to the various regulatory requirements applicable to U.S. utilities. However, any federal, state, local or other applicable regulations could place significant restrictions on our ability to operate our business and execute our business plan by prohibiting or otherwise restricting our sale of electricity. These regulatory requirements could include restricting our sale of electricity, as well as regulating the price of our solar service offerings. For example, the New York Public Service Commission recently issued an order regulating distributed energy providers as if they were energy service companies, which increases the regulatory compliance burden for us in that state. If we become subject to the same regulatory authorities as utilities in other states or if new regulatory bodies are established to oversee our business, then our operating costs could materially increase.

Our business depends in part on the regulatory treatment of third-party owned solar energy systems.

Our Customer Agreements are third-party ownership arrangements. Sales of electricity by third parties face regulatory challenges in some states and jurisdictions. These challenges pertain to issues such as whether third party-owned systems qualify for the same rebates, tax exemptions or other non-tax incentives available for homeowner-owned solar energy systems, whether third-party-owned systems are eligible at all for these incentives, and whether third-party-owned systems are eligible for net metering and the associated significant cost savings. Adverse regulatory treatment of third-party ownership arrangements could reduce demand for our solar service offerings, adversely impact our access to capital and cause us to increase the price we charge homeowners for energy.

Interconnection limits or circuit-level caps imposed by regulators may significantly reduce our ability to sell electricity from our solar service offerings in certain markets or slow interconnections, harming our growth rate and customer satisfaction scores.

Interconnection rules establish the circumstances in which rooftop solar will be connected to the electricity grid. Interconnection limits or circuit-level caps imposed by regulators may curb our growth in key markets. Utilities throughout the country have different rules and regulations regarding interconnection and some utilities cap or limit the amount of solar energy that can be interconnected to the grid. Our systems do not provide power to homeowners until they are interconnected to the grid.

Interconnection regulations are based on claims from utilities regarding the amount of solar electricity that can be connected to the grid without causing grid reliability issues or requiring significant grid upgrades. Although recent rulings from the Hawaii Utilities Commission have helped resolve some problems, historically, interconnection limits or circuit-level caps have slowed the pace of our installations in Hawaii. Similar interconnection limits could slow our future installations in Hawaii or other markets, harming our growth rate and customer satisfaction scores. Similarly, the Hawaii Public Utilities Commission recently required the activation of some advanced inverter functionality that may require more expensive equipment and more oversight of the operation of the solar systems over time, which could adversely affect our business.
We may be required to make payments or contribute assets to our investors upon the occurrence of certain events, including one-time reset or true-up payments or upon the exercise of a redemption option by one of our investors.

Our fund investors typically advance capital to us based on production capacity estimates. The models we use to calculate prepayments in connection with certain of our investment funds will be updated for each investment fund at a fixed date occurring after placement in service of all applicable solar energy systems or an agreed upon date (typically within the first year of the applicable term) to reflect certain specified conditions as they exist at such date including the ultimate system size of the equipment that was leased, how much it cost, and when it went into service. In some cases, these true-up models will also incorporate any changes in law, which would include any reduction in rates (and thus any reduction in the benefits of depreciation). As a result of this true-up, applicable payments are resized, and we may be obligated to refund a portion of the investor’s prepayments or to contribute additional assets to the investment fund. In addition, certain of our fund investors have the right to require us to purchase their interests in the investment funds after a set period of time, generally at a price equal to the greater of a set purchase price or fair market value of the interests at the time of the repurchase. Any significant refunds, capital contributions or purchases that we may be required to make could adversely affect our liquidity or financial condition.

A material drop in the retail price of utility-generated electricity or electricity from other sources would harm our business, financial condition and results of operations.

We believe that a homeowner’s decision to buy solar energy from us is primarily driven by a desire to lower electricity costs. Decreases in the retail prices of electricity from utilities or other energy sources would harm our ability to offer competitive pricing and could harm our business. The price of electricity from utilities could decrease as a result of:

- the construction of a significant number of new power generation plants, including nuclear, coal, natural gas or renewable energy technologies;
- the construction of additional electric transmission and distribution lines;
- a reduction in the price of natural gas or other natural resources as a result of new drilling techniques or other technological developments, a relaxation of associated regulatory standards, or broader economic or policy developments;
- energy conservation technologies and public initiatives to reduce electricity consumption; and
- development of new energy technologies that provide less expensive energy.

A reduction in utility electricity prices would make the purchase of our solar service offerings less attractive. If the retail price of energy available from utilities were to decrease due to any of these or other reasons, we would be at a competitive disadvantage. As a result, we may be unable to attract new homeowners and our growth would be limited.

It is difficult to evaluate our business and prospects due to our limited operating history.

Our limited operating history, particularly as a publicly traded company, combined with the rapidly evolving and competitive nature of our industry, may not provide an adequate basis for you to evaluate our results of operations and business prospects. We cannot assure you that we will continue to be successful in generating revenue from our current solar service offerings or from any additional solar service offerings we may introduce in the future. In addition, we only have limited insight into emerging trends, such as alternative energy sources, commodity prices in the overall energy market, and legal and regulatory changes that impact the solar industry, any of which could adversely impact our business, prospects and results of operations.

We have incurred losses and may be unable to sustain profitability in the future.

We have incurred net losses in the past and may continue to incur net losses as we increase our spending to finance the expansion of our operations, expand our installation, engineering, administrative, sales and marketing staffs, increase spending on our brand awareness and other sales and marketing initiatives, and implement internal systems and infrastructure to support our growth. We do not know whether our revenue will grow rapidly enough to absorb these costs and our limited operating history makes it difficult to assess the extent of these expenses or
their impact on our results of operations. Our ability to sustain profitability depends on a number of factors, including but not limited to:

- growing our customer base;
- finding investors willing to invest in our investment funds on favorable terms;
- maintaining or further lowering our cost of capital;
- reducing the cost of components for our solar service offerings;
- growing and maintaining our channel partner network;
- growing our direct-to-consumer business to scale;
- reducing our operating costs by lowering our customer acquisition costs and optimizing our design and installation processes and supply chain logistics.

Even if we do sustain profitability, we may be unable to achieve positive cash flows from operations in the future.

Our results of operations may fluctuate from quarter to quarter, which could make our future performance difficult to predict and could cause our results of operations for a particular period to fall below expectations, resulting in a decline in the price of our common stock.

Our quarterly results of operations are difficult to predict and may fluctuate significantly in the future. We have experienced seasonal and quarterly fluctuations in the past and expect these fluctuations to continue. However, given that we are operating in a rapidly changing industry, those fluctuations may be masked by our recent growth rates and thus may not be readily apparent from our historical results of operations. As such, our past quarterly results of operations may not be good indicators of likely future performance.

In addition to the other risks described in this "Risk Factors" section, as well as the factors discussed in "Management’s Discussion and Analysis of Financial Condition and Results of Operations” section, the following factors could cause our results of operations and key performance indicators to fluctuate:

- the expiration, reduction or initiation of any governmental tax rebates, tax exemptions or incentives;
- significant fluctuations in homeowner demand for our solar service offerings or fluctuations in the geographic concentration of installations of solar energy systems;
- changes in financial markets, which could restrict our ability to access available and cost-effective financing sources;
- seasonal, environmental or weather conditions that impact sales, energy production and system installations;
- the amount and timing of operating expenses related to the maintenance and expansion of our business, operations and infrastructure;
- announcements by us or our competitors of new products or services, significant acquisitions, strategic partnerships, joint ventures or capital-raising activities or commitments;
- changes in our pricing policies or terms or those of our competitors, including utilities;
- changes in regulatory policy related to solar energy generation;
- the loss of one or more key partners or the failure of key partners to perform as anticipated;
- actual or anticipated developments in our competitors’ businesses or the competitive landscape;
- actual or anticipated changes in our growth rate;
- general economic, industry and market conditions; and
- changes to our cancellation rate.

In the past, we have experienced seasonal fluctuations in sales and installations, particularly in the fourth quarter. This has been the result of decreased sales through the holiday season and weather-related installation delays. Our incentives revenue is also highly variable due to associated revenue recognition rules, as discussed in
greater detail in the section titled “Management’s Discussion and Analysis of Financial Condition and Results of Operations.” Seasonal and other factors may also contribute to variability in our sales of solar energy systems and product sales. For these or other reasons, the results of any prior quarterly or annual periods should not be relied upon as indications of our future performance. In addition, our actual revenue or key operating metrics in one or more future quarters may fall short of the expectations of investors and financial analysts. If that occurs, the trading price of our common stock could decline and you could lose part or all of your investment.

Our actual financial results may differ materially from any guidance we may publish from time to time.

We have in the past and may, from time to time, provide guidance regarding our future performance that represents our management’s estimates as of the date such guidance is provided. Any such guidance is based upon a number of assumptions with respect to future business decisions (some of which may change) and estimates that, while presented with numerical specificity, are inherently subject to significant business, economic and competitive uncertainties and contingencies (many of which are beyond our control). Guidance is necessarily speculative in nature, and it can be expected that some or all of the assumptions that inform such guidance will not materialize or will vary significantly from actual results. Our ability to meet deployment volume, cost, net present value or any other forward-looking guidance is impacted by a number of factors including, but not limited to, the number of our solar energy systems sold versus leased, changes in installation costs, the availability of additional financing on acceptable terms, changes in the retail prices of traditional utility generated electricity, the availability of rebates, tax credits and other incentives, changes in policies and regulations including net metering and interconnection limits or caps, the availability of solar panels and other raw materials, as well as the other risks to our business that are described in this section. Accordingly, our guidance is only an estimate of what management believes is realizable as of the date such guidance is provided. Actual results may vary from such guidance and the variations may be material. Investors should also recognize that the reliability of any forecasted financial data diminishes the farther in the future that the data is forecast. In light of the foregoing, investors should not place undue reliance on our financial guidance, and should carefully consider any guidance we may publish in context.

If we fail to manage our recent and future growth effectively, we may be unable to execute our business plan, maintain high levels of customer service or adequately address competitive challenges.

We have experienced significant growth in recent periods, and we intend to continue to expand our business within existing markets and in a number of new locations in the future. This growth has placed, and any future growth may place, a significant strain on our management, operational and financial infrastructure. In particular, we will be required to expand, train and manage our growing employee base and solar partners. Our management will also be required to maintain and expand our relationships with homeowners, suppliers and other third parties and attract new homeowners and suppliers, as well as to manage multiple geographic locations.

In addition, our current and planned operations, personnel, systems and procedures might be inadequate to support our future growth and may require us to make additional unanticipated investment in our infrastructure, including additional costs for the expansion of our employee base and our solar partners as well as marketing and branding costs. Our success and ability to further scale our business will depend, in part, on our ability to manage these changes in a cost-effective and efficient manner. If we cannot manage our growth, we may be unable to take advantage of market opportunities, execute our business strategies or respond to competitive pressures. This could also result in declines in quality or homeowner satisfaction, increased costs, difficulties in introducing new solar service offerings or other operational difficulties. Any failure to effectively manage growth could adversely impact our business and reputation.
Servicing our debt requires a significant amount of cash to comply with certain covenants and satisfy payment obligations, and we may not have sufficient cash flow from our business to pay our substantial debt and may be forced to take other actions to satisfy our obligations under our indebtedness, which may not be successful.

We have substantial amounts of debt, including the working capital facility and the non-recourse debt facilities entered into by our subsidiaries, as discussed in more detail in the section titled “Management’s Discussion and Analysis of Financial Condition and Results of Operations” and our consolidated financial statements. Our ability to make scheduled payments of the principal of, to pay interest on or to refinance our indebtedness depends on our future performance, which is subject to economic, financial, competitive and other factors beyond our control. Our business may not continue to generate cash flow from operations in the future sufficient to service our debt and make necessary capital expenditures to operate our business. If we are unable to generate such cash flow, we may be required to adopt one or more alternatives, such as selling assets, restructuring debt or obtaining additional equity capital on terms that may be onerous or highly dilutive. Our ability to timely repay or otherwise refinance our indebtedness will depend on the capital markets and our financial condition at such time. We may not be able to engage in any of these activities or engage in these activities on desirable terms, which could result in a default on our debt obligations.

We expect to incur substantially more debt in the future, which could intensify the risks to our business.

We and our subsidiaries expect to incur additional debt in the future, subject to the restrictions contained in our debt instruments. Our existing debt arrangements restrict our ability to incur additional indebtedness, including secured indebtedness, and we may be subject to similar restrictions under the terms of future debt arrangements. These restrictions could inhibit our ability to pursue our business strategies. Increases in our existing debt obligations would further heighten the debt related risk discussed above.

Furthermore, there is no assurance that we will be able to enter into new debt instruments on acceptable terms or at all. If we were unable to satisfy financial covenants and other terms under existing or new instruments, or obtain waivers or forbearance from our lenders, or if we were unable to obtain refinancing or new financings for our working capital, equipment and other needs on acceptable terms if and when needed, our business would be adversely affected.

The production and installation of solar energy systems depends heavily on suitable meteorological and environmental conditions. If meteorological or environmental conditions are unexpectedly unfavorable, the electricity production from our solar service offerings may be below our expectations, and our ability to timely deploy new systems may be adversely impacted.

The energy produced and revenue and cash flows generated by a solar energy system depend on suitable solar and weather conditions, both of which are beyond our control. Furthermore, components of our systems, such as panels and inverters, could be damaged by severe weather or natural catastrophes, such as hailstorms, tornadoes, fires or earthquakes. In these circumstances, we generally would be obligated to bear the expense of repairing the damaged solar energy systems that we own. Sustained unfavorable weather or environmental conditions also could unexpectedly delay the installation of our solar energy systems, leading to increased expenses and decreased revenue and cash flows in the relevant periods. Extreme weather conditions, as well as the natural catastrophes that could result from such conditions, can severely impact our operations by delaying the installation of our systems, lowering sales, and causing a decrease in the output from our systems due to smoke or haze. Weather patterns could change, making it harder to predict the average annual amount of sunlight striking each location where our solar energy systems are installed. This could make our solar service offerings less economical overall or make individual systems less economical. Any of these events or conditions could harm our business, financial condition and results of operations.
Our business is concentrated in certain markets, putting us at risk of region specific disruptions.

As of December 31, 2018, more than 40% of our customers were in California. Accordingly, our business and results of operations are particularly susceptible to adverse economic, regulatory, political, weather and other conditions in this market and in other markets that may become similarly concentrated, in particular the east coast, where we have seen significant growth recently. In addition, our corporate and sales headquarters are located in San Francisco, California, an area that has a heightened risk of earthquakes and nearby wildfires. We may not have adequate insurance, including business interruption insurance, to compensate us for losses that may occur from any such significant events, including damage to our solar energy systems. A significant natural disaster, such as an earthquake or wildfire, could have a material adverse impact on our business, results of operations and financial condition. In addition, acts of terrorism or malicious computer viruses could cause disruptions in our or our solar partners’ businesses or the economy as a whole. To the extent that these disruptions result in delays or cancellations of installations or the deployment of our solar service offerings, our business, results of operations and financial condition would be adversely affected.

Loan financing developments could adversely impact our business.

The third-party ownership structure, which we bring to market through our solar service offerings, continues to be the predominant form of system ownership in the residential solar market in many states. However, with the development of new loan financing products, we have seen a modest shift from leasing to outright purchases of the solar energy system by the homeowner (i.e., a homeowner purchases the solar energy system outright instead of leasing the system from us). Continued increases in third-party loan financing products and outright purchases could result in the demand for long-term Customer Agreements to decline, which would require us to shift our product focus to respond to the market trend and could have an adverse effect on our business. In 2018, 2017 and 2016, the majority of our customers chose our solar service offerings as opposed to buying a solar energy system outright. Our financial model is impacted by the volume of homeowners who choose our solar service offerings, and an increase in the number of customers who choose to purchase solar energy systems (whether for cash or through third-party financing) may harm our business and financial results.

The federal government currently offers a 30% Residential ITC for the installation of certain solar power facilities owned by residential taxpayers. The Residential ITC is expected to ramp down from 30% to 26% for solar property commencing construction in 2020 and then further to 22% for solar property commencing construction in 2021. The Residential ITC is set to expire after 2021, while the Commercial ITC will step down to 10% for both (i) solar property commencing construction after 2021 and (ii) solar property that commenced construction during or prior to 2021 but is placed in service after 2023. Reductions in, eliminations of, or expirations of, governmental incentives such as the Residential ITC could reduce the number of customers who choose to purchase our solar energy systems.

Our growth depends in part on the success of our relationships with third parties, including our solar partners.

A key component of our growth strategy is to develop or expand our relationships with third parties. For example, we are investing resources in establishing strategic relationships with market players across a variety of industries, including large retailers, to generate new customers. These programs may not roll out as quickly as planned or produce the results we anticipated. A significant portion of our business depends on attracting and retaining new and existing solar partners. Negotiating relationships with our solar partners, investing in due diligence efforts with potential solar partners, training such third parties and contractors, and monitoring them for compliance with our standards require significant time and resources and may present greater risks and challenges than expanding a direct sales or installation team. If we are unsuccessful in establishing or maintaining our relationships with these third parties, our ability to grow our business and address our market opportunity could be impaired. Even if we are able to establish and maintain these relationships, we may not be able to execute on our goal of leveraging these relationships to meaningfully expand our business, brand recognition and customer base. This would limit our growth potential and our opportunities to generate significant additional revenue or cash flows.
We and our solar partners depend on a limited number of suppliers of solar panels and other system components to adequately meet anticipated demand for our solar service offerings. Any shortage, delay or component price change from these suppliers, or the acquisition of any of these suppliers by a competitor, could result in sales and installation delays, cancellations and loss of market share.

We and our solar partners purchase solar panels, inverters and other system components and batteries from a limited number of suppliers, making us susceptible to quality issues, shortages and price changes. If we or our solar partners fail to develop, maintain and expand our relationships with these or other suppliers, we may be unable to adequately meet anticipated demand for our solar service offerings, or we may only be able to offer our systems at higher costs or after delays. If one or more of the suppliers that we or our solar partners rely upon to meet anticipated demand ceases or reduces production, we may be unable to quickly identify alternate suppliers or to qualify alternative products on commercially reasonable terms, and we may be unable to satisfy this demand. The acquisition of a supplier by one of our competitors could limit our access to such components and require significant redesigns of our solar energy systems or installation procedures and have a material adverse effect on our business.

In particular, there are a limited number of suppliers of inverters, which are components that convert electricity generated by solar panels into electricity that can be used to power the home. For example, once we design a system for use with a particular inverter, if that type of inverter is not readily available at an anticipated price, we may incur delays and additional expenses to redesign the system. Further, the inverters on our solar energy systems generally carry only ten year warranties. If there is an inverter equipment shortage in a year when a substantial number of inverters on our systems need to be replaced, we may not be able to replace the inverters to maintain proper system functioning or may be forced to do so at higher than anticipated prices, either of which would adversely impact our business.

There have also been periods of industry-wide shortage of key components, including solar panels, in times of rapid industry growth. For example, new or unexpected changes in rooftop fire codes or building codes may require new or different system components to satisfy compliance with such newly effective codes or regulations, which may not be readily available for distribution to us or our suppliers. The manufacturing infrastructure for some of these components has a long lead time, requires significant capital investment and relies on the continued availability of key commodity materials, potentially resulting in an inability to meet demand for these components and, as a result, could negatively impact our ability to install systems in a timely manner. Further, any decline in the exchange rate of the U.S. dollar compared to the functional currency of our component suppliers could increase our component prices. Any of these shortages, delays or price changes could limit our growth, cause cancellations or adversely affect our operating margins, and result in loss of market share and damage to our brand.

As the primary entity that contracts with homeowners, we are subject to risks associated with construction, cost overruns, delays, customer cancellations, regulatory compliance and other contingencies, any of which could have a material adverse effect on our business and results of operations.

We are a licensed contractor in certain communities that we service, and we are ultimately responsible as the contracting party for every solar energy system installation. We may be liable, either directly or through our solar partners, to homeowners for any damage we cause to them, their home, belongings or property during the installation of our systems. For example, we, either directly or through our solar partners, frequently penetrate homeowners’ roofs during the installation process and may incur liability for the failure to adequately weatherproof such penetrations following the completion of construction. In addition, because the solar energy systems we or our solar partners deploy are high voltage energy systems, we may incur liability for any failure to comply with electrical standards and manufacturer recommendations.

Completing the sale and installation of a solar energy system requires many different steps including a site audit, completion of designs, permitting, installation, electrical sign-off and interconnection. Homeowners may cancel their Customer Agreement, subject to certain conditions, during this process until commencement of installation, and we have experienced increased customer cancellations in certain geographic markets during certain periods in our operating history. We or our solar partners may face customer cancellations, delays or cost overruns which may adversely affect our or our solar partners’ ability to ramp up the volume of sales or installations in accordance with our plans. These cancellations, delays or overruns may be the result of a variety of factors, such as labor shortages or other labor issues, defects in materials and workmanship, adverse weather conditions, transportation constraints, construction change orders, site changes or roof conditions, geographic factors and other unforeseen difficulties, any of which could lead to increased cancellation rates, reputational harm and other...
adverse effects. For example, some customer orders are cancelled after a site visit if we determine that a customer needs to make repairs to or install a new roof, or that there is excessive shading on their property. If we continue to experience increased customer cancellations, our financial results will potentially be materially and adversely affected.

In addition, the installation of solar energy systems, energy-storage systems and other energy-related products requiring building modifications are subject to oversight and regulation in accordance with national, state and local laws and ordinances relating to building, fire and electrical codes, safety, environmental protection, utility interconnection and metering, and related matters. We also rely on certain of our and our partners’ employees to maintain professional licenses in many of the jurisdictions in which we operate, and our failure to employ properly licensed personnel could adversely affect our licensing status in those jurisdictions. It is difficult and costly to track the requirements of every individual authority having jurisdiction over our installations and to design solar energy systems to comply with these varying standards. Any new government regulations or utility policies pertaining to our systems may result in significant additional expenses to us and our homeowners and, as a result, could cause a significant reduction in demand for our solar service offerings.

While we have a variety of stringent quality standards that we apply in the selection of our solar partners, we do not control our suppliers and solar partners or their business practices. Accordingly, we cannot guarantee that they follow our standards or ethical business practices, such as fair wage practices and compliance with environmental, safety and other local laws. A lack of demonstrated compliance could lead us to seek alternative suppliers or contractors, which could increase our costs and result in delayed delivery or installation of our products, product shortages or other disruptions of our operations. Violation of labor or other laws by our suppliers and solar partners or the divergence of a supplier’s or solar partner’s labor or other practices from those generally accepted as ethical in the United States or other markets in which we do business could also attract negative publicity for us and harm our business, brand and reputation in the market.

We typically bear the risk of loss and the cost of maintenance, repair and removal on solar energy systems that are owned or leased by our investment funds.

We typically bear the risk of loss and are generally obligated to cover the cost of maintenance, repair and removal for any solar energy system that we sell or lease to our investment funds. At the time we sell or lease a solar energy system to an investment fund, we enter into a maintenance services agreement where we agree to operate and maintain the system for a fixed fee that is calculated to cover our future expected maintenance costs. If our solar energy systems require an above-average amount of repairs or if the cost of repairing systems were higher than our estimate, we would need to perform such repairs without additional compensation. If our solar energy systems, more than 40% of which are located in California, are damaged as the result of a natural disaster beyond our control, losses could exceed or be excluded from, our insurance policy limits, and we could incur unforeseen costs that could harm our business and financial condition. We may also incur significant costs for taking other actions in preparation for, or in reaction to, such events. We purchase property insurance with industry standard coverage and limits approved by an investor’s third-party insurance advisors to hedge against such risk, but such coverage may not cover our losses.

Disruptions to our solar production metering solution could negatively impact our revenues and increase our expenses.

Our ability to monitor solar energy production for various purposes depends on the operation of our metering solution. We could incur significant expense and disruption to our operations in connection with failures of our metering solution, including meter hardware failures and failure or obsolescence of the cellular technology that we use to communicate with those meters. For example, many of our meters operate on either the 2G or 3G cellular data networks, which are expected to sunset before the term of our Customer Agreements with homeowners, and newer technologies we use today may become obsolete before the end of the term of Customer Agreements entered into now. Upgrading our metering solution may cause us to incur significant expense. Additionally, our meters communicate data through proprietary software, which we license from our metering partners. Should we be unable to continue to license, on agreeable terms, the software necessary to communicate with our meters, it could cause a significant disruption in our business and operations.
Problems with product quality or performance may cause us to incur warranty expenses and performance guarantee expenses, may lower the residual value of our solar energy systems and may damage our market reputation and cause our financial results to decline.

Homeowners who enter into Customer Agreements with us are covered by production guarantees and roof penetration warranties. As the owners of the solar energy systems, we or our investment funds receive a warranty from the inverter and solar panel manufacturers, and, for those solar energy systems that we do not install directly, we receive workmanship and material warranties as well as roof penetration warranties from our solar partners. For example, in 2015 and 2014, we had to replace a significant number of defective inverters, the cost of which was borne by the manufacturer. However, our customers were without solar service for a period of time while the work was done, which impacted customer satisfaction. Furthermore, one or more of our third-party manufacturers or solar partners could cease operations and no longer honor these warranties, leaving us to fulfill these potential obligations to homeowners. Further, we provide a performance guarantee with certain solar service offerings pursuant to which we compensate homeowners on an annual basis if their system does not meet the electricity production guarantees set forth in their agreement with us. Homeowners who enter into Customer Agreements with us are covered by production guarantees equal to the length of the term of these agreements, typically 20 or 25 years.

Because of our limited operating history, we have been required to make assumptions and apply judgments regarding a number of factors, including our anticipated rate of warranty claims and the durability, performance and reliability of our solar energy systems. Our assumptions could prove to be materially different from the actual performance of our systems, causing us to incur substantial expense to repair or replace defective solar energy systems in the future or to compensate homeowners for systems that do not meet their production guarantees. Product failures or operational deficiencies also would reduce our revenue from power purchase or lease agreements because they are dependent on system production. Any widespread product failures or operating deficiencies may damage our market reputation and adversely impact our financial results.

Product liability claims against us could result in adverse publicity and potentially significant monetary damages.

If our solar service offerings, including our racking systems or other products, injured someone, we would be exposed to product liability claims. Because solar energy systems and many of our other current and anticipated products are electricity-producing devices, it is possible that consumers or their property could be injured or damaged by our products, whether by product malfunctions, defects, improper installation or other causes. We rely on third-party manufacturing warranties, warranties provided by our solar partners and our general liability insurance to cover product liability claims and have not obtained separate product liability insurance. Any product liability claim we face could be expensive to defend and divert management’s attention. The successful assertion of product liability claims against us could result in potentially significant monetary damages that could require us to make significant payments, as well as subject us to adverse publicity, damage our reputation and competitive position and adversely affect sales of our systems and other products. In addition, product liability claims, injuries, defects or other problems experienced by other companies in the residential solar industry could lead to unfavorable market conditions to the industry as a whole, and may have an adverse effect on our ability to attract homeowners, thus affecting our growth and financial performance.

The value of our solar energy systems at the end of the associated term of the lease or power purchase agreement may be lower than projected, which may adversely affect our financial performance and valuation.

We depreciate the costs of our solar energy systems over their estimated useful life of 35 years. At the end of the initial term of the Customer Agreement, customers may choose to purchase their solar energy systems, ask to remove the system at our cost or renew their Customer Agreements. Homeowners may choose to not renew or purchase for any reason, such as pricing, decreased energy consumption, relocation of residence or switching to a competitor product. Furthermore, it is difficult to predict how future environmental regulations may affect the costs associated with the removal, disposal or recycling of our solar energy systems. If the value in trade or renewal revenue is less than we expect, we may be required to recognize all or some of the remaining unamortized costs. This could materially impair our future results of operations.
Damage to our brand and reputation or failure to expand our brand would harm our business and results of operations.

We depend significantly on our brand and reputation for high-quality solar service offerings, engineering and customer service to attract homeowners and grow our business. If we fail to continue to deliver our solar service offerings within the planned timelines, if our solar service offerings do not perform as anticipated or if we damage any homeowners’ properties or cancel projects, our brand and reputation could be significantly impaired. We also depend greatly on referrals from homeowners for our growth. Therefore, our inability to meet or exceed homeowners’ expectations would harm our reputation and growth through referrals. We have at times focused particular attention on expeditiously growing our direct sales force and our solar partners, leading us in some instances to hire personnel or partner with third parties who we may later determine do not fit our company culture and standards. Given the sheer volume of interactions our direct sales force and our solar partners have with customers and potential customers, it is also unavoidable that some interactions will be perceived by customers and potential customers as less than satisfactory and result in complaints. If we cannot manage our hiring and training processes to limit potential issues and maintain appropriate customer service levels, our brand and reputation may be harmed and our ability to grow our business would suffer. In addition, if we were unable to achieve a similar level of brand recognition as our competitors, some of which currently have a broader brand footprint as a result of a larger direct sales force, more resources and longer operational history, we could lose recognition in the marketplace among prospective customers, suppliers and partners, which could affect our growth and financial performance. Our growth strategy involves marketing and branding initiatives that will involve incurring significant expenses in advance of corresponding revenues. We cannot assure you that such marketing and branding expenses will result in the successful expansion of our brand recognition or increase our revenues.

A failure to hire and retain a sufficient number of employees and service providers in key functions would constrain our growth and our ability to timely complete homeowners’ projects and successfully manage homeowner accounts.

To support our growth, we need to hire, train, deploy, manage and retain a substantial number of skilled employees, engineers, installers, electricians, sales and project finance specialists. Competition for qualified personnel in our industry is increasing, particularly for skilled personnel involved in the installation of solar energy systems. We may be unable to attract or retain qualified and skilled installation personnel or installation companies to be our solar partners, which would have an adverse effect on our business. We and our solar partners also compete with the homebuilding and construction industries for skilled labor. As these industries grow and seek to hire additional workers, our cost of labor may increase. The unionization of the industry’s labor force could also increase our labor costs. Shortages of skilled labor could significantly delay a project or otherwise increase our costs. Because our profit on a particular installation is based in part on assumptions as to the cost of such project, cost overruns, delays or other execution issues may cause us to not achieve our expected margins or cover our costs for that project. In addition, because we are headquartered in the San Francisco Bay Area, we compete for a limited pool of technical and engineering resources that requires us to pay wages that are competitive with relatively high regional standards for employees in these fields. Further, we need to continue to expand upon the training of our customer service team to provide high-end account management and service to homeowners before, during and following the point of installation of our solar energy systems. Identifying and recruiting qualified personnel and training them requires significant time, expense and attention. It can take several months before a new customer service team member is fully trained and productive at the standards that we have established. If we are unable to hire, develop and retain talented customer service personnel, we may not be able to realize the expected benefits of this investment or grow our business.

In addition, to support the growth and success of our direct-to-consumer channel, we need to recruit, retain and motivate a large number of sales personnel on a continuing basis. We compete with many other companies for qualified sales personnel, and it could take many months before a new salesperson is fully trained on our solar service offerings. If we are unable to hire, develop and retain qualified sales personnel or if they are unable to achieve desired productivity levels, we may not be able to compete effectively.

If we or our solar partners cannot meet our hiring, retention and efficiency goals, we may be unable to complete homeowners’ projects on time or manage homeowner accounts in an acceptable manner or at all. Any significant failures in this regard would materially impair our growth, reputation, business and financial results. If we are required to pay higher compensation than we anticipate, these greater expenses may also adversely impact our financial results and the growth of our business.

25
The loss of one or more members of our senior management or key employees may adversely affect our ability to implement our strategy.

We depend on our experienced management team, and the loss of one or more key executives could have a negative impact on our business. In particular, we are dependent on the services of our chief executive officer and co-founder, Lynn Jurich, and our Chairman and co-founder, Edward Fenster. We also depend on our ability to retain and motivate key employees and attract qualified new employees. Neither our founders nor our key employees are bound by employment agreements for any specific term, and we may be unable to replace key members of our management team and key employees in the event we lose their services. Integrating new employees into our management team could prove disruptive to our operations, require substantial resources and management attention and ultimately prove unsuccessful. An inability to attract and retain sufficient managerial personnel who have critical industry experience and relationships could limit or delay our strategic efforts, which could have a material adverse effect on our business, financial condition and results of operations.

We may not realize the anticipated benefits of past or future acquisitions, and integration of these acquisitions may disrupt our business and management.

We acquired MEC in February 2014 and Clean Energy Experts, LLC (“CEE”) in April 2015. We may in the future acquire additional companies, project pipelines, products, or technologies or enter into joint ventures or other strategic initiatives. We may not realize the anticipated benefits of past or future acquisitions, and any acquisition has numerous risks that are not within our control. These risks include the following, among others:

- difficulty in assimilating the operations and personnel of the acquired company, especially given our unique culture;
- difficulty in effectively integrating the acquired technologies or products with our current products and technologies;
- difficulty in maintaining controls, procedures and policies during the transition and integration;
- disruption of our ongoing business and distraction of our management and employees from other opportunities and challenges due to integration issues;
- difficulty integrating the acquired company’s accounting, management information and other administrative systems;
- inability to retain key technical and managerial personnel of the acquired business;
- inability to retain key customers, vendors and other business partners of the acquired business;
- inability to achieve the financial and strategic goals for the acquired and combined businesses;
- incurring acquisition-related costs or amortization costs for acquired intangible assets that could impact our results of operations;
- significant post-acquisition investments which may lower the actual benefits realized through the acquisition;
- potential failure of the due diligence processes to identify significant issues with product quality, legal and financial liabilities, among other things;
- potential inability to assert that internal controls over financial reporting are effective; and
- potential inability to obtain, or obtain in a timely manner, approvals from governmental authorities, which could delay or prevent such acquisitions.

Our failure to address these risks, or other problems encountered in connection with our past or future acquisitions, could cause us to fail to realize the anticipated benefits of these acquisitions or investments, cause us to incur unanticipated liabilities, and harm our business generally. Future acquisitions could also result in dilutive issuances of our equity securities, the incurrence of debt, contingent liabilities, amortization expenses, incremental expenses or the write-off of goodwill, any of which could harm our financial condition or results of operations.

Mergers and acquisitions of companies are inherently risky, may not produce the anticipated benefits and could adversely affect our business, financial condition or results of operations.
If we are unsuccessful in developing and maintaining our proprietary technology, including our BrightPath software, our ability to attract and retain solar partners could be impaired, our competitive position could be harmed and our revenue could be reduced.

Our future growth depends on our ability to continue to develop and maintain our proprietary technology that supports our solar service offerings, including our design and proposal software, BrightPath. In addition, we rely, and expect to continue to rely, on licensing agreements with certain third parties for aerial images that allow us to efficiently and effectively analyze a homeowner’s rooftop for solar energy system specifications. In the event that our current or future products require features that we have not developed or licensed, or we lose the benefit of an existing license, we will be required to develop or obtain such technology through purchase, license or other arrangements. If the required technology is not available on commercially reasonable terms, or at all, we may incur additional expenses in an effort to internally develop the required technology. In addition, our BrightPath software was developed, in part, with U.S. federal government funding. When new technologies are developed with U.S. government funding, the government obtains certain rights in any resulting patents, including a nonexclusive license authorizing the government to use the invention for non-commercial purposes. These rights may permit the government to disclose our confidential information to third parties and to exercise “march-in” rights to use or allow third parties to use our patented technology. We are also subject to certain reporting and other obligations to the U.S. government in connection with funding for BrightPath. If we were unable to maintain our existing proprietary technology, our ability to attract and retain solar partners could be impaired, our competitive position could be harmed and our revenue could be reduced.

Our business may be harmed if we fail to properly protect our intellectual property, and we may also be required to defend against claims or indemnify others against claims that our intellectual property infringes on the intellectual property rights of third parties.

We believe that the success of our business depends in part on our proprietary technology, including our software, information, processes and know-how. We rely on copyright, trade secret and patent protections to secure our intellectual property rights. Although we may incur substantial costs in protecting our technology, we cannot be certain that we have adequately protected or will be able to adequately protect it, that our competitors will not be able to utilize our existing technology or develop similar technology independently, that the claims allowed with respect to any patents held by us will be broad enough to protect our technology or that foreign intellectual property laws will adequately protect our intellectual property rights. Moreover, we cannot be certain that our patents provide us with a competitive advantage. Despite our precautions, it may be possible for third parties to obtain and use our intellectual property without our consent. Unauthorized use of our intellectual property by third parties, and the expenses incurred in protecting our intellectual property rights, may adversely affect our business. In the future, some of our products could be alleged to infringe existing patents or other intellectual property of third parties, and we cannot be certain that we will prevail in any intellectual property dispute. In addition, any future litigation required to enforce our patents, to protect our trade secrets or know-how or to defend us or indemnify others against claimed infringement of the rights of third parties could harm our business, financial condition and results of operations.

We are subject to legal proceedings, regulatory inquiries and litigation, and we may be named in additional legal proceedings, become involved in regulatory inquiries or be subject to litigation in the future, all of which are costly, distracting to our core business and could result in an unfavorable outcome, or a material adverse effect on our business, financial condition, results of operations, or the trading price for our securities.

We are involved in legal proceedings and receive inquiries from government and regulatory agencies. In the event that we are involved in significant disputes or are the subject of a formal action by a regulatory agency, we could be exposed to costly and time-consuming legal proceedings that could result in any number of outcomes. Although outcomes of such actions vary, any current or future claims or regulatory actions initiated by or against us, whether successful or not, could result in significant costs, costly damage awards or settlement amounts, injunctive relief, increased costs of business, fines or orders to change certain business practices, significant dedication of management time, diversion of significant operational resources, or otherwise harm our business.

If we are not successful in our legal proceedings and litigation, we may be required to pay significant monetary damages, which could hurt our results of operations. Lawsuits are time-consuming and expensive to resolve and divert management’s time and attention. Although we carry general liability insurance, our insurance may not cover potential claims or may not be adequate to indemnify us for all liability that may be imposed. We cannot predict how the courts will rule in any potential lawsuit against us. Decisions in favor of parties that bring
lawsuits against us could subject us to significant liability for damages, adversely affect our results of operations and harm our reputation.

A failure to comply with laws and regulations relating to our interactions with current or prospective residential customers could result in negative publicity, claims, investigations, and litigation, and adversely affect our financial performance.

Our business involves transactions with homeowners. We and our solar partners must comply with numerous federal, state and local laws and regulations that govern matters relating to our interactions with homeowners, including those pertaining to privacy and data security, consumer financial and credit transactions, home improvement contracts, warranties and direct-to-home solicitation. These laws and regulations are dynamic and subject to potentially differing interpretations, and various federal, state and local legislative and regulatory bodies may expand current laws or regulations, or enact new laws and regulations, regarding these matters. Changes in these laws or regulations or their interpretation could dramatically affect how we do business, acquire customers, and manage and use information we collect from and about current and prospective customers and the costs associated therewith. We strive to comply with all applicable laws and regulations relating to our interactions with residential customers. It is possible, however, that these requirements may be interpreted and applied in a manner that is inconsistent from one jurisdiction to another and may conflict with other rules or our practices. Our noncompliance with any such laws or regulations, or the perception that we or our solar partners have violated such laws or regulations or engaged in deceptive practices that could result in a violation, could also expose us to claims, proceedings, litigation and investigations by private parties and regulatory authorities, as well as substantial fines and negative publicity, each of which may materially and adversely affect our business. We have incurred, and will continue to incur, significant expenses to comply with such laws and regulations, and increased regulation of matters relating to our interactions with residential customers could require us to modify our operations and incur significant additional expenses, which could have an adverse effect on our business, financial condition and results of operations.

Compliance with occupational safety and health requirements and best practices can be costly, and noncompliance with such requirements may result in potentially significant penalties, operational delays and adverse publicity.

The installation of solar energy systems requires our employees and employees of our solar partners to work with complicated and potentially dangerous electrical systems. The evaluation and installation of our energy-related products require these employees to work in locations that may contain potentially dangerous levels of asbestos, lead or mold or other substances. We also maintain large fleets of vehicles that these employees use in the course of their work. There is substantial risk of serious injury or death if proper safety procedures are not followed. Our operations are subject to regulation under OSHA and equivalent state laws. Changes to OSHA requirements, or stricter interpretation or enforcement of existing laws or regulations, could result in increased costs. If we fail to comply with applicable OSHA regulations, even if no work-related serious injury or death occurs, we may be subject to civil or criminal enforcement and be required to pay substantial penalties, incur significant capital expenditures, or suspend or limit operations. Any accidents, citations, violations, injuries or failure to comply with industry best practices may subject us to adverse publicity, damage our reputation and competitive position and adversely affect our business.

We are exposed to the credit risk of homeowners and payment delinquencies on our accounts receivables.

Our Customer Agreements are typically for 20 or 25 years and require the homeowner to make monthly payments to us. Accordingly, we are subject to the credit risk of homeowners. As of December 31, 2018, the average FICO score of our customers under a lease or power purchase agreement with a monthly payment schedule remained at or above 740, which is generally categorized as a "Very Good" credit profile by the Fair Isaac Corporation. However, this may decline to the extent FICO score requirements under future investment funds are relaxed. While to date homeowner defaults have been immaterial, we expect that the risk of homeowner defaults may increase as we grow our business. Due to the immaterial amount of homeowner defaults to date, our reserve for this exposure is minimal, and our future exposure may exceed the amount of such reserves. If we experience increased homeowner credit defaults, our revenues and our ability to raise new investment funds could be adversely affected. If economic conditions worsen, certain of our homeowners may face liquidity concerns and may be unable to satisfy their payment obligations to us on a timely basis or at all, which could have a material adverse effect on our financial condition and results of operations.
Obtaining a sales contract with a potential customer does not guarantee that a potential customer will not decide to cancel or that we will need to
cancel due to a failed inspection, which could cause us to generate no revenue from a product and adversely affect our results of operations.

Even after we secure a sales contract with a potential customer, we (either directly or through our solar partners) must perform an inspection to ensure
the home, including the rooftop, meets our standards and specifications. If the inspection finds repairs to the rooftop are required in order to satisfy our
standards and specifications to install the solar energy system, and a potential customer does not want to make such required repairs, we would lose that
anticipated sale. In addition, per the terms of our Customer Agreements, a customer maintains the ability to cancel before commencement of installation, subject
to certain conditions. Any delay or cancellation of an anticipated sale could materially and adversely affect our financial results, as we may have incurred sales-
related, design-related and other expenses and generated no revenue.

We use “open source” software in our solutions, which may require that we release the source code of certain software subject to open source
licenses or subject us to possible litigation or other actions that could adversely affect our business.

We utilize software that is licensed under so-called “open source,” “free” or other similar licenses. Open source software is made available to the general
public on an “as-is” basis under the terms of a non-negotiable license. We currently combine our proprietary software with open source software but not in a
manner that we believe requires the release of the source code of our proprietary software to the public. However, our use of open source software may entail
greater risks than use of third-party commercial software. Open source licensors generally do not provide warranties or other contractual protections regarding
infringement claims or the quality of the code. In addition, if we combine our proprietary software with open source software in a certain manner, we could,
under certain open source licenses, be required to release the source code of our proprietary software to the public. This would allow our competitors to create
similar offerings with lower development effort and time.

We may also face claims alleging noncompliance with open source license terms or infringement or misappropriation of proprietary software. These
claims could result in litigation, require us to purchase a costly license or require us to devote additional research and development resources to change our
software, any of which would have a negative effect on our business and results of operations. In addition, if the license terms for open source software that we
use change, we may be forced to re-engineer our solutions, incur additional costs or discontinue the use of these solutions if re-engineering cannot be
accomplished on a timely basis. Although we monitor our use of open source software to avoid subjecting our offerings to unintended conditions, few courts
have interpreted open source licenses, and there is a risk that these licenses could be construed in a way that could impose unanticipated conditions or
restrictions on our ability to use our proprietary software. We cannot guarantee that we have incorporated or will incorporate open source software in our
software in a manner that will not subject us to liability or in a manner that is consistent with our current policies and procedures.

Any security breach or unauthorized disclosure or theft of personal information we gather, store and use, or other hacking and phishing attacks on
our systems, could harm our reputation and subject us to claims or litigation.

We receive, store and use personal information of homeowners, including names, addresses, e-mail addresses, credit information and other housing and
energy use information, as well as the personal information of our employees. Unauthorized disclosure of such personal information, whether through breach of
our systems by an unauthorized party, employee theft or misuse, or otherwise, could harm our business. In addition, computer malware, viruses, social
engineering (predominantly spear phishing attacks), and general hacking have become more prevalent, have occurred on our systems in the past, and could
occur on our systems in the future. Inadvertent disclosure of such personal information, or if a third party were to gain unauthorized access to the personal
information in our possession, could result in claims or litigation arising from damages suffered by such individuals. In addition, we could incur significant costs
in complying with the multitude of federal, state and local laws regarding the unauthorized disclosure of personal information. Our efforts to protect such
personal information may be unsuccessful due to software bugs or other technical malfunctions; employees, contractor, or vendor error or malfeasance; or other
threats that evolve. In addition, third parties may attempt to fraudulently induce employees or users to disclose sensitive information. Although we have
developed systems and processes that are designed to protect the personal information we receive, store and use and to prevent or detect security breaches,
we cannot assure you that such measures will provide absolute security. Finally, any perceived or actual unauthorized
disclosure of such information could harm our reputation, substantially impair our ability to attract and retain homeowners and have an adverse impact on our business.

If our products do not work as well as planned or if we are unsuccessful in developing and selling new products or in penetrating new markets, our business, financial condition and results of operations could be adversely affected.

Our success and ability to compete are dependent on the products that we have developed or may develop in the future. There is a risk that the products that we have developed or may develop may not work as intended, or that the marketing of the products may not be as successful as anticipated. For example, we introduced our Brightbox energy storage system in Hawaii and California and completed the first installation in Hawaii in May 2016. If Brightbox does not work as intended or if Brightbox is not adopted in the future at the rate we expect, our business, financial condition and results of operations could be adversely affected. The development of new products generally requires substantial investment and can require long development and testing periods before they are commercially viable. We intend to continue to make substantial investments in developing new products and it is possible that we may not develop or acquire new products or product enhancements that compete effectively within our target markets or differentiate our products based on functionality, performance or cost and thus our new technologies and products may not result in meaningful revenue. In addition, any delays in developing and releasing new or enhanced products could cause us to lose revenue opportunities and potential customers. Any technical flaws in product releases could diminish the innovative impact of our products and have a negative effect on customer adoption and our reputation. If we fail to introduce new products that meet the demands of our customers or target markets or do not achieve market acceptance, or if we fail to penetrate new markets, our business, financial conditions and results of operations could be adversely affected.

The requirements of being a public company may strain our resources, divert management’s attention and affect our ability to attract and retain qualified board members and officers.

We are subject to the reporting requirements of the Exchange Act, the listing requirements of the NASDAQ Stock Market and other applicable securities rules and regulations. Compliance with these rules and regulations has increased our legal and financial compliance costs, made some activities more difficult, time-consuming or costly and increased demand on our systems and resources. The Exchange Act requires, among other things, that we file annual, quarterly and current reports with respect to our business and results of operations and maintain effective disclosure controls and procedures and internal control over financial reporting. To maintain and improve our disclosure controls and procedures and internal control over financial reporting to meet this standard, significant resources and management oversight may be required. As a result, management’s attention may be diverted from other business concerns, which could harm our business and results of operations. Although we have already hired additional employees to comply with these requirements, we may need to hire more employees in the future, which will increase our costs and expenses.

If we are unable to maintain effective disclosure controls and internal controls over financial reporting, investors may lose confidence in the accuracy and completeness of our financial reports and, as a result, the value of our common stock may be materially and adversely affected.

We are required, pursuant to the Exchange Act, to furnish a report by management on, among other things, the effectiveness of our internal controls over financial reporting. This assessment includes disclosure of any material weaknesses, if any, identified by our management in our internal controls over financial reporting. Our independent registered public accounting firm ("Independent accounting firm") has performed its initial audit of our internal controls over financial reporting. This initial audit of our internal controls over financial reporting identified no material weaknesses as of December 31, 2018. However, we or our independent accounting firm may identify weaknesses and deficiencies that we may not otherwise identify in a timely manner in the future. If our independent accounting firm is not able to complete the work required under Section 404 of the Sarbanes-Oxley Act on a timely basis for future fiscal years, our annual report on Form 10-K may be delayed or deficient. Because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that misstatements due to error or fraud will not occur or that all control issues and instances of fraud will be detected.

We cannot guarantee that our internal control over financial reporting will prevent or detect all errors and fraud. The risk of errors is increased in light of the complexity of our business and investment funds. For example, we must deal with significant complexity in accounting for our fund structures and the resulting allocation of net
income (loss) between our stockholders and noncontrolling interests under the hypothetical liquidation at book value ("HLBV") method as well as the income tax consequences of these fund structures. As we enter into additional investment funds, which may have contractual provisions different from those of our existing funds, the analysis as to whether we consolidate these funds, the calculation under the HLBV method, and the analysis of the tax impact could become increasingly complicated. This additional complexity could require us to hire additional resources and increase the chance that we experience errors in the future.

If we are unable to assert that our internal control over financial reporting is effective, we could lose investor confidence in the accuracy and completeness of our financial reports, which would cause the price of our common stock to decline. In addition, we could become subject to investigations by the NASDAQ Stock Market, the Securities and Exchange Commission ("SEC") or other regulatory authorities, which could require additional management attention and which could adversely affect our business.

Our reported financial results may be affected, and comparability of our financial results with other companies in our industry may be impacted, by changes in the accounting principles generally accepted in the United States.

Generally accepted accounting principles in the United States are subject to change and interpretation by the Financial Accounting Standards Board ("FASB"), the SEC, and various bodies formed to promulgate and interpret appropriate accounting principles. A change in these principles or interpretations could have a significant effect on our reported financial results and on the financial results of other companies in our industry, and may even affect the reporting of transactions completed before the announcement or effectiveness of a change. For example, in May 2014 the FASB issued Accounting Standards Update No. 2014-09, Revenue from Contracts with Customers ("Topic 606") and in February 2016 the FASB issued Accounting Standards Update No. 2016-02, Leases ("Topic 842"), which affected certain elements of our accounting for revenue and costs incurred to acquire contracts when we adopted these standards in 2018. Other companies in our industry may be affected differently by the adoption of Topic 606 or other new accounting standards, including timing of the adoption of new accounting standards, adversely affecting the comparability of financial statements. See Note 2, Summary of Significant Accounting Policies, for information about Topic 606 and Topic 842.

We may be adversely affected by changes in U.S. tax laws.

On December 22, 2017 Congress and the current administration passed significant tax legislation including a change to the corporate tax rate. As part of this Tax Act, the current corporate income tax rate was reduced, and there were other changes including limiting or eliminating various other deductions, credits and tax preferences. This reduction in the corporate income tax rate could reduce the value of certain benefits, such as depreciation, and reduce capacity for other benefits, such as tax credits. Limitations on, or elimination of, such tax benefits could significantly impact our ability to raise tax equity investment funds or impact the terms thereof, including the amount of cash distributable to third parties. At this time, we are evaluating the potential impact on our tax equity investment funds, business, prospects and results of operations as a result of enactment, since the impact is dependent upon certain tax treatment elections and the specific timing of taxable income/losses in future years. The new legislation includes significant changes which require additional guidance to be issued by the IRS.

Our ability to use our net operating loss carryforwards and certain other tax attributes may be limited.

As of December 31, 2018, we had U.S. federal and state net operating loss carryforwards of $1.1 billion each, which begin expiring in varying amounts in 2028 and 2024, respectively, if unused. Under Sections 382 and 383 of the Code if a corporation undergoes an “ownership change,” the corporation’s ability to use its pre-change net operating loss carryforwards and other pre-change tax attributes, such as research tax credits, to offset its post-change income and taxes may be limited. In general, an “ownership change” occurs if there is a cumulative change in our ownership by “5% shareholders” that exceeds 50 percentage points over a rolling three-year period. Similar rules may apply under state tax laws. Any such limitations on our ability to use our net operating loss carryforwards and other tax assets could adversely impact our business, financial condition and results of operations. We have performed an analysis to determine whether an ownership change under Section 382 of the Code had occurred and determined that no ownership changes were identified as of December 31, 2018.

We may be required to record an impairment expense on our goodwill or intangible assets.
We are required under generally accepted accounting principles to test goodwill for impairment at least annually or when events or changes in circumstances indicate that the carrying amount may be impaired, and to review our intangible assets for impairment when events or changes in circumstances indicate the carrying value may not be recoverable. Factors that can lead to impairment of goodwill and intangible assets include significant adverse changes in the business climate and actual or projected operating results, declines in the financial condition of our business and sustained decrease in our stock price. As of October 1, 2018, we did not identify any qualitative factors that would require a quantitative goodwill impairment analysis. However, if we identify any factors that could indicate an impairment, including a sustained decrease in our stock price, we may be required to record charges to earnings if our goodwill becomes impaired.
Risks Related to Ownership of Our Common Stock

Our executive officers, directors and principal stockholders continue to have substantial control over us, which will limit your ability to influence the outcome of important matters, including a change in control.

Each of our executive officers, directors and each of our stockholders who beneficially own 5% or more of our outstanding common stock and their affiliates, in the aggregate, beneficially own approximately 52% of the outstanding shares of our common stock, based on the number of shares outstanding as of December 31, 2018. As a result, these stockholders, if acting together, will be able to influence or control matters requiring approval by our stockholders, including the election of directors and the approval of mergers, acquisitions or other extraordinary transactions. They may also have interests that differ from yours and may vote in a way which you disagree and which may be adverse to your interests. This concentrated control may have the effect of delaying or preventing a change in control of our company, could deprive our stockholders of an opportunity to receive a premium for their capital stock and might ultimately affect the market price of our common stock.

The market price of our common stock has been and may continue to be volatile, and you could lose all or part of your investment.

The trading price of our common stock has been volatile since our initial public offering, and is likely to continue to be volatile. Factors that could cause fluctuations in the market price of our common stock include the following:

• price and volume fluctuations in the overall stock market from time to time;
• volatility in the market prices and trading volumes of companies in our industry or companies that investors consider comparable;
• changes in operating performance and stock market valuations of other companies generally, or those in our industry in particular;
• sales of shares of our common stock by us or our stockholders;
• failure of securities analysts to maintain coverage of us, changes in financial estimates by securities analysts who follow us, or our failure to meet these estimates or the expectations of investors;
• the financial projections we may provide to the public, any changes in those projections or our failure to meet those projections;
• announcements by us or our competitors of new products or services;
• the public’s reaction to our press releases, other public announcements and filings with the SEC;
• rumors and market speculation involving us or other companies in our industry;
• actual or anticipated changes in our results of operations;
• changes in tax and other incentives that we rely upon in order to raise tax equity investment funds;
• changes in the regulatory environment and utility policies and pricing, including those that could reduce any savings we are able to offer to customers;
• actual or anticipated developments in our business, our competitors’ businesses or the competitive landscape generally;
• litigation involving us, our industry or both, or investigations by regulators into our operations or those of our competitors;
• announced or completed acquisitions of businesses or technologies by us or our competitors;
• new laws or regulations or new interpretations of existing laws or regulations applicable to our business;
• changes in accounting standards, policies, guidelines, interpretations or principles;
• any significant change in our management; and
• general economic conditions and slow or negative growth of our markets.
Further, in recent years the stock markets have experienced price and volume fluctuations that have affected and continue to affect the market prices of equity securities of many companies. These fluctuations often have been unrelated or disproportionate to the operating performance of those companies. In addition, the stock prices of many renewable energy companies have experienced fluctuations that have often been unrelated to the operating performance of those companies. These broad market and industry fluctuations, as well as general economic, political and market conditions such as recessions, government shutdowns, interest rate changes, or international currency fluctuations, may cause the market price of our common stock to decline. In the past, following periods of volatility in the overall market and the market price of a particular company’s securities, securities class action litigation has often been instituted against these companies. We are party to litigation which could result in substantial costs and a diversion of our management’s attention and resources.

Sales of a substantial number of shares of our common stock in the public market, including by our existing stockholders, could cause our stock price to fall.

Sales of a substantial number of shares of our common stock in the public market, or the perception that these sales might occur, could depress the market price of our common stock and could impair our ability to raise capital through the sale of additional equity securities. We are unable to predict the effect that these sales and others may have on the prevailing market price of our common stock.

In addition, certain of our stockholders have registration rights that would require us to register shares of our capital stock owned by them for public sale in the United States. We have also filed a registration statement to register shares of our common stock reserved for future issuance under our equity compensation plans. Subject to the satisfaction of applicable exercise periods and applicable volume and restrictions that apply to affiliates, the shares of our common stock issued upon exercise of outstanding options will become available for immediate resale in the public market upon issuance.

Future sales of our common stock may make it more difficult for us to sell equity securities in the future at a time and at a price that we deem appropriate. These sales also could cause the market price of our common stock to decline and make it more difficult for you to sell shares of our common stock.

Anti-takeover provisions contained in our amended and restated certificate of incorporation and amended and restated bylaws, as well as provisions of Delaware law, could impair a takeover attempt.

Our amended and restated certificate of incorporation, amended and restated bylaws and Delaware law contain provisions which could have the effect of rendering more difficult, delaying, or preventing an acquisition deemed undesirable by our board of directors and therefore depress the trading price of our common stock. Among other things, our amended and restated certificate of incorporation and amended and restated bylaws include provisions:

- creating a classified board of directors whose members serve staggered three-year terms;
- authorizing “blank check” preferred stock, which could be issued by our board of directors without stockholder approval and may contain voting, liquidation, dividend and other rights superior to our common stock;
- limiting the liability of, and providing indemnification to, our directors and officers;
- limiting the ability of our stockholders to call and bring business before special meetings;
- requiring advance notice of stockholder proposals for business to be conducted at meetings of our stockholders and for nominations of candidates for election to our board of directors; and
- controlling the procedures for the conduct and scheduling of board of directors and stockholder meetings.

These provisions, alone or together, could delay or prevent hostile takeovers and changes in control or changes in our management.

As a Delaware corporation, we are also subject to provisions of Delaware law, including Section 203 of the Delaware General Corporation law, which prevents certain stockholders holding more than 15% of our outstanding capital stock from engaging in certain business combinations without approval of the holders of at least two-thirds of our outstanding capital stock not held by such stockholder.
Any provision of our amended and restated certificate of incorporation, amended and restated bylaws or Delaware law that has the effect of delaying or preventing a change in control could limit the opportunity for our stockholders to receive a premium for their shares of our capital stock and could also affect the price that some investors are willing to pay for our common stock.

Provisions contained in our amended and restated certificate of incorporation and amended and restated bylaws limit the ability of our stockholders to call special meetings and prohibit stockholder action by written consent.

Our amended and restated certificate of incorporation provides that our stockholders may not take action by written consent. Instead, any such actions must be taken at an annual or special meeting of our stockholders. As a result, our stockholders are not able to take any action without first holding a meeting of our stockholders called in accordance with the provisions of our amended and restated bylaws, including advance notice procedures set forth in our amended and restated bylaws. Our amended and restated bylaws further provide that special meetings of our stockholders may be called only by a majority of our board of directors, the chairman of our board of directors, our Chief Executive Officer or our President. As a result, our stockholders are not allowed to call a special meeting. These provisions may delay the ability of our stockholders to force consideration of a stockholder proposal, including a proposal to remove directors.

Provisions contained in our amended and restated certificate of incorporation and amended and restated bylaws could preclude our stockholders from bringing matters before meetings of stockholders and delay changes in our board of directors.

Our amended and restated bylaws provide advance notice procedures for stockholders seeking to bring business before, or nominate candidates for election as directors at, our annual or special meetings of stockholders. In addition, our amended and restated certificate of incorporation provides that stockholders may remove directors only for cause. Any amendment of these provisions in our amended and restated bylaws or amended and restated certificate of incorporation would require approval by holders of at least 66 2/3% of our then outstanding capital stock. These provisions could preclude our stockholders from bringing matters before annual or special meetings of stockholders and delay changes in our board of directors.

Our amended and restated bylaws provide that a state or federal court located within the State of Delaware will be the sole and exclusive forum for substantially all disputes between us and our stockholders, which could limit our stockholders' ability to obtain a favorable judicial forum for disputes with us or our directors, officers or employees.

Our amended and restated bylaws provide that, unless we consent to the selection of an alternative forum, the sole and exclusive forum for (i) any derivative action or proceeding brought on our behalf, (ii) any action asserting a claim of breach of fiduciary duty owed by any of our directors, officers or other employees to us or to our stockholders, (iii) any action asserting a claim arising pursuant to any provision of the Delaware General Corporation Law or (iv) any action asserting a claim governed by the internal affairs doctrine shall be a state or federal court located within the state of Delaware, in all cases subject to the court's having personal jurisdiction over the indispensable parties names as defendants. The choice of forum provision may limit a stockholder's ability to bring a claim in a judicial forum that it finds favorable for disputes with us or our directors, officers or other employees, which may discourage such lawsuits against us and our directors, officers and other employees. Alternatively, if a court were to find the choice of forum provision contained in our amended and restated bylaws to be inapplicable or unenforceable in an action, we may incur additional costs associated with resolving such action in other jurisdictions, which could harm our business, results of operations and financial condition.

If securities or industry analysts cease publishing research or reports about us, our business, our market or our competitors, or if they adversely change their recommendations regarding our common stock, the market price of our common stock and trading volume could decline.
The market for our common stock is influenced by the research and reports that securities or industry analysts publish about us, our business, our market or our competitors. If any of the analysts who cover us adversely change their recommendations regarding our common stock, or provide more favorable recommendations about our competitors, the market price of our common stock would likely decline. If any of the analysts who cover us cease coverage of our company or fail to regularly publish reports on us, we could lose visibility in the financial markets, which in turn could cause the market price of our common stock and trading volume to decline.

We do not expect to declare any dividends in the foreseeable future.

We do not anticipate declaring any cash dividends to holders of our common stock in the foreseeable future. Consequently, investors may need to rely on sales of our common stock after price appreciation, which may never occur or only occur at certain times, as the only way to realize any future gains on their investment. Investors seeking cash dividends should not purchase shares of our common stock.

Additional stock issuances could result in dilution to our stockholders.

We may issue additional equity securities to raise capital, make acquisitions or for a variety of other purposes. Additional issuances of our stock may be made pursuant to the exercise or conversion of new or existing convertible debt securities, warrants, stock options or other equity incentive awards to new and existing service providers. Any such issuances will result in dilution to existing holders of our stock. We rely on equity-based compensation as an important tool in recruiting and retaining employees. The amount of dilution due to equity-based compensation of our employees and other additional issuances could be substantial.

Item 1B. Unresolved Staff Comments.

Not applicable.
Item 2. Properties.

Our corporate headquarters and executive offices are located in San Francisco, California, where we occupy approximately 44,000 square feet of office space. We also maintain 52 other locations, consisting primarily of branch offices, warehouses, sales offices and design centers in 17 states.

We lease all of our facilities and we do not own any real property. We believe that our current facilities are adequate to meet our ongoing needs. If we require additional space, we believe that we will be able to obtain additional facilities on commercially reasonable terms.

Item 3. Legal Proceedings.

See Note 20, Commitments and Contingencies, to our consolidated financial statements included elsewhere in this Annual Report on Form 10-K.

Item 4. Mine Safety Disclosures.

Not applicable.
Item 5. Market for Registrant’s Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities.

Market Information

Our common stock began trading on the NASDAQ Global Select Market under the symbol “RUN” on August 5, 2015.

Holders of Record

As of February 25, 2019, there were approximately 161 holders of record of common stock. Certain shares are held in “street” name and, accordingly, the number of beneficial owners of such shares is not known or included in the foregoing number.

Dividend Policy

We have never declared or paid any cash dividends on our capital stock. We currently intend to retain all available funds and any future earnings for use in the operation of our business and do not expect to pay any dividends on our capital stock in the foreseeable future. Any future determination to declare dividends will be made at the discretion of our board of directors, subject to applicable laws, and will depend on a number of factors, including our financial condition, results of operations, capital requirements, contractual restrictions, general business conditions and other factors that our board of directors may deem relevant. In addition, our credit agreements contain restrictions on payments of cash dividends.

Stock Price Performance Graph

The following stock performance graph compares our total stock return with the total return for (i) the NASDAQ Composite Index and the (ii) the Invesco Solar ETF, which represents a peer group of solar companies, for the period from August 5, 2015 (the date our common stock commenced trading on the NASDAQ Global Select Market) through December 31, 2018. The figures represented below assume an investment of $100 in our common stock at the closing price of $10.77 on August 5, 2015 and in the NASDAQ Composite Index and the Invesco Solar ETF on August 5, 2015 including the reinvestment of dividends into shares of common stock. The comparisons in the table are required by the SEC, and are not intended to forecast or be indicative of possible future performance of our common stock. This graph shall not be deemed “soliciting material” or be deemed “filed” for purposes of Section 18 of the Exchange Act, or otherwise subject to the liabilities under that section, and shall not be deemed to be incorporated by reference into any of our filings under the Securities Act, whether made before or after the date hereof and irrespective of any general incorporation language in any such filing.
### Item 6. Selected Consolidated Financial Data.

You should read the following selected consolidated financial data below in conjunction with "Management’s Discussion and Analysis of Financial Condition and Results of Operations" and the consolidated financial statements, related notes and other financial information included elsewhere in this Annual Report on Form 10-K. The selected consolidated financial data in this section is not intended to replace the consolidated financial statements and are qualified in their entirety by the consolidated financial statements and related notes included elsewhere in this Annual Report on Form 10-K.

The selected consolidated statements of operations data for the years ended December 31, 2018, 2017 and 2016, and the selected consolidated balance sheet data as of December 31, 2018 and 2017 are derived from our audited consolidated financial statements included elsewhere in this Annual Report on Form 10-K. The selected consolidated statements of operations data for the years ended December 31, 2015 and 2014, and the selected consolidated balance sheet data as of December 31, 2016, 2015 and 2014 are derived from audited consolidated financial statements which are not included in this Annual Report on Form 10-K. Our historical results are not necessarily indicative of the results that may be expected in the future.

<table>
<thead>
<tr>
<th>Ticker</th>
<th>August 5, 2015</th>
<th>December 31, 2017</th>
<th>December 31, 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sunrun Inc.</td>
<td>RUN</td>
<td>$100.00</td>
<td>$54.78</td>
</tr>
<tr>
<td>NASDAQ Composite Index</td>
<td>^IXIC</td>
<td>$100.00</td>
<td>$134.31</td>
</tr>
<tr>
<td>Invesco Solar ETF</td>
<td>TAN</td>
<td>$100.00</td>
<td>$79.31</td>
</tr>
</tbody>
</table>

(1) Reflects the impact of the adoption of new accounting standards in 2018 related to revenue recognition and leases. Refer to Note 2, Summary of Significant Accounting Policies of the Notes to Financial Statements of this Annual Report on Form 10-K for further discussion.
As of December 31,

<table>
<thead>
<tr>
<th></th>
<th>2018</th>
<th>2017(1)</th>
<th>2016(1)</th>
<th>2015</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Consolidated Balance Sheet Data:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cash and Restricted Cash</td>
<td>$304,399</td>
<td>$241,790</td>
<td>$224,363</td>
<td>$221,161</td>
<td>$160,700</td>
</tr>
<tr>
<td>Solar energy systems, net</td>
<td>3,820,017</td>
<td>3,161,570</td>
<td>2,498,644</td>
<td>1,992,021</td>
<td>1,484,251</td>
</tr>
<tr>
<td>Total assets</td>
<td>4,749,787</td>
<td>3,963,136</td>
<td>3,595,803</td>
<td>2,734,592</td>
<td>1,932,584</td>
</tr>
<tr>
<td>Non-recourse debt, current portion</td>
<td>35,484</td>
<td>21,529</td>
<td>14,153</td>
<td>4,722</td>
<td>2,602</td>
</tr>
<tr>
<td>Recourse debt</td>
<td>247,000</td>
<td>247,000</td>
<td>244,000</td>
<td>197,000</td>
<td>48,597</td>
</tr>
<tr>
<td>Non-recourse debt, net of current portion</td>
<td>1,466,438</td>
<td>1,026,416</td>
<td>639,870</td>
<td>333,042</td>
<td>188,052</td>
</tr>
<tr>
<td>Total equity</td>
<td>1,282,782</td>
<td>1,240,516</td>
<td>995,728</td>
<td>659,560</td>
<td>416,619</td>
</tr>
</tbody>
</table>

(1) Reflects the impact of the adoption of new accounting standards in 2018 related to revenue recognition and leases. Refer to Note 2, Summary of Significant Accounting Policies of the Notes to Financial Statements of this Annual Report on Form 10-K for further discussion.
The following discussion and analysis of our financial condition and results of operations should be read in conjunction with our consolidated financial statements and related notes thereto included elsewhere in this Annual Report on Form 10-K. This discussion contains forward-looking statements that involve risks and uncertainties. Our actual results could differ materially from those discussed below. Factors that could cause or contribute to such differences include those identified below and those discussed in the section titled “Risk Factors” included elsewhere in this Annual Report on Form 10-K.

We provide clean, solar energy to homeowners at a significant savings compared to traditional utility energy. We have been selling solar energy to residential customers through a variety of offerings since we were founded in 2007. We, either directly or through one of our solar partners, install a solar energy system on a customer’s home and either sell the system to the homeowner or, as is more often the case, sell the energy generated by the system to the homeowner pursuant to a lease or power purchase agreement (“PPA”) with no or low upfront costs. We refer to these leases and PPAs as “Customer Agreements.” Following installation, a system is interconnected to the local utility grid. The home’s energy usage is provided by the solar energy system, with any additional energy needs provided by the local utility. Any excess solar energy, including amounts in excess of battery storage, that is not immediately used by the homeowner is exported to the utility grid using a bi-directional utility net meter, and the homeowner generally receives a credit for the excess energy from their utility to offset future usage of utility-generated energy.

We offer our solar service offerings both directly to the homeowner and through our solar partners, which include sales and installation partners, and strategic partners, which include retail partners. In addition, we sell solar energy systems directly to customers for cash. We also sell solar energy panels and other products (such as racking) to resellers. As of December 31, 2018, we provided our solar services to customers in 22 states, plus the District of Columbia and Puerto Rico, and sold solar energy panels and other products to resellers throughout the United States. More than 40% of our cumulative systems deployed are in California.

We compete mainly with traditional utilities. In the markets we serve, our strategy is to price the energy we sell below prevailing local retail electricity rates. As a result, the price our customers pay under our solar service offerings varies depending on the state where the customer lives, the local traditional utility that otherwise provides electricity to the customer, as well as the prices other solar energy companies charge in that region. Even within the same neighborhood, site-specific characteristics drive meaningful variability in the revenue and cost profiles of each home. Using our proprietary technology, we target homes with advantageous revenue and cost characteristics, which means we are often able to offer pricing that allows customers to save more on their energy bill while maintaining our ability to meet our targeted returns. For example, with the insights provided by our technology, we can offer competitive pricing to customers with homes that have favorable characteristics, such as roofs that allow for easy installation, high electricity consumption, or low shading, effectively passing through the cost savings we are able to achieve on these installations to the homeowner.

Our ability to offer Customer Agreements depends in part on our ability to finance the purchase and installation of the solar energy systems by monetizing the resulting customer cash flows and related investment tax credits (“ITCs”), accelerated tax depreciation and other incentives from governments and local utilities. We monetize these incentives under tax equity investment funds, which are generally structured as non-recourse project financings. From inception to February 25, 2019, we have established 39 investment funds, which represent financing for an estimated $7.9 billion in value of solar energy systems on a cumulative basis. From time to time, we may repurchase investors’ interests in our tax equity investment funds after the recapture period of the relevant tax incentives. We intend to establish additional investment funds and may also use debt, equity and other financing strategies to fund our growth.

In addition, completing the sale and installation of a solar energy system requires many different steps including a site audit, completion of designs, permitting, installation, electrical sign-off and interconnection. Homeowners may cancel their Customer Agreements with us, subject to certain conditions, during this process until commencement of installation. Customer cancellation rates can change over time and vary between markets.

**Investment Funds**

Our Customer Agreements provide for recurring customer payments, typically over 20 or 25 years, and the related solar energy systems are generally eligible for ITCs, accelerated tax depreciation and other government or
utility incentives. Our financing strategy is to monetize these benefits at a low weighted average cost of capital. This low cost of capital enables us to offer attractive pricing to our customers for the energy generated by the solar energy system on their homes. Historically, we have monetized a portion of the value created by our Customer Agreements and the related solar energy systems through investment funds. These assets are attractive to fund investors due to the long-term, recurring nature of the cash flows generated by our Customer Agreements, the high credit scores of our customers, the fact that energy is a non-discretionary good and our low loss rates. In addition, fund investors can receive attractive after-tax returns from our investment funds due to their ability to utilize ITCs, accelerated depreciation and certain government or utility incentives associated with the funds’ ownership of solar energy systems.

From inception to February 25, 2019, we have formed 39 investment funds. Of these, 31 are currently active and are described below. We have established different types of investment funds to implement our asset monetization strategy. Depending on the nature of the investment fund, cash may be contributed to the investment fund by the investor upfront or in stages based on milestones associated with the design, construction or interconnection status of the solar energy systems. The cash contributed by the fund investor is used by the investment fund to purchase solar energy systems. The investment funds either own or enter into a master lease with a Sunrun subsidiary for the solar energy systems, Customer Agreements and associated incentives. We receive ongoing cash distributions from the investment funds representing a portion of the monthly customer payments received. We use the upfront cash, as well as ongoing distributions to cover our costs associated with designing, purchasing and installing the solar energy systems. In addition, we also use debt, equity and other financing strategies to fund our operations. The allocation of the economic benefits between us and the fund investor and the corresponding accounting treatment varies depending on the structure of the investment fund.

We currently utilize three legal structures in our investment funds, which we refer to as: (i) pass-through financing obligations, (ii) partnership flips and (iii) joint venture (“JV”) inverted leases. We reflect pass-through financing obligations on our consolidated balance sheet as a pass-through financing obligation. We record the investor’s interest in partnership flips or JV inverted leases (which we define collectively as “consolidated joint ventures”) as noncontrolling interests or redeemable noncontrolling interests. These consolidated joint ventures are usually redeemable at our option and, in certain cases, at the investor’s option. If redemption is at our option or the consolidated joint ventures are not redeemable, we record the investor’s interest as a noncontrolling interest and account for the interest using the hypothetical liquidation at book value (“HLBV”) method. If the investor has the option to put their interest to us, we record the investor’s interest as redeemable noncontrolling interest at the greater of the HLBV and the redemption value.

42
The table below provides an overview of our current investment funds (dollars in millions):

<table>
<thead>
<tr>
<th>Consolidation</th>
<th>Pass-Through Financing Obligations</th>
<th>Consolidated Joint Ventures</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Owner entity consolidated, tenant entity not consolidated</td>
<td>Single entity, consolidated</td>
</tr>
<tr>
<td>Balance sheet classification</td>
<td>Pass-through financing obligation</td>
<td>Redeemable noncontrolling interests and noncontrolling interests</td>
</tr>
<tr>
<td>Revenue from ITCs</td>
<td>Recognized on the PTO date</td>
<td>None</td>
</tr>
<tr>
<td>Method of calculating investor interest</td>
<td>Effective interest rate method</td>
<td>Greater of HLBV or redemption value</td>
</tr>
<tr>
<td>Liability balance as of December 31, 2018</td>
<td>$363.7</td>
<td>N/A</td>
</tr>
<tr>
<td>Noncontrolling interest balance (redeemable or otherwise) as of December 31, 2018</td>
<td>N/A</td>
<td>$425.7</td>
</tr>
<tr>
<td>Number of funds (as of December 31, 2018)</td>
<td>7</td>
<td>21</td>
</tr>
<tr>
<td>MW deployed (as of December 31, 2018)</td>
<td>229.5</td>
<td>904.0</td>
</tr>
<tr>
<td>Carrying value of solar energy systems, net (as of December 31, 2018)</td>
<td>$613.5</td>
<td>$2,359.3</td>
</tr>
<tr>
<td>Contributions from third-party fund investors (through December 31, 2018)</td>
<td>$788.3</td>
<td>$1,955.5</td>
</tr>
</tbody>
</table>

For further information regarding our investment funds, including the associated risks, see Item 1A. Risk Factors—“Our ability to provide our solar service offerings to homeowners on an economically viable basis depends in part on our ability to finance these systems with fund investors who seek particular tax and other benefits.”, Note 11, Cash Equity Financing, Note 14, Pass-Through Financing Obligations, Note 15, VIE Arrangements and Note 16, Redeemable Noncontrolling Interests to our consolidated financial statements appearing elsewhere in this Annual Report on Form 10-K.

Pass-through Financing Obligations

Pass-through Financing Obligations. In this investment fund structure, we and the fund investor each utilize separate entities to facilitate the pass-through of the ITC or U.S. Treasury grants to the fund investors. We contribute solar energy systems to an “owner” entity in exchange for interests in the owner entity, and the fund investors contribute cash to a “tenant” entity in exchange for interests in the tenant entity.

Under our pass-through financing obligation structure, in accordance with the provisions of Financial Accounting Standards Board (“FASB”), Accounting Standards Codification Topic 810 (“ASC 810”), Consolidation, we have determined that we are the primary beneficiary of the owner entity, and accordingly, we consolidate that entity. We have also determined that we are not the primary beneficiary of the tenant entity, and accordingly, we do not consolidate that entity.

In this investment fund structure, the investors make a series of large up-front payments as well as, in some instances, subsequent smaller quarterly lease payments through their respective tenant entity to the corresponding owner entity in exchange for the assignment of cash flows from Customer Agreements and certain other benefits associated with the Customer Agreements and related solar energy systems. We account for the payments from investors as borrowings by recording the proceeds received as financing obligations. The financing obligation is reduced over a period of approximately 22 years by customer payments under the Customer Agreements, U.S. Treasury grants (where applicable), incentive rebates (where applicable) and proceeds from the contracted resale of SRECs as they are received by the investor. In addition, funds paid for the ITC value upfront are initially recorded
as a refund liability and recognized as revenue as the associated solar system reaches permission to operate ("PTO").

We account for these investment funds in our consolidated financial statements as if we have not assigned the Customer Agreement to the investor, and we record on our consolidated financial statements activities arising from the Customer Agreements and any related U.S. Treasury grants, ITCs monetized as part of the upfront payments received from the investor, incentive rebates and SREC sales. The interest charge on our pass-through financing obligations is imputed at the inception of the fund based on the effective interest rate in the arrangement giving rise to the obligation and is updated prospectively as appropriate.

In certain arrangements, we agree to defer a portion of the up-front payments by arranging a loan between one of our indirectly wholly owned subsidiaries to a subsidiary of the investor's tenant entity.

### Consolidated Joint Ventures

**Partnership Flips.** Under partnership flip structures, we and our fund investors contribute cash into a partnership entity. The partnership uses the cash to acquire solar energy systems developed by us with signed Customer Agreements. Each fund investor receives a rate of return, typically on an after-tax basis, which varies by investment fund. Prior to the fund investor receiving its contractual rate of return or for a time period specified in the contractual arrangements, the fund investor receives a significant portion of the value attributable to customer payments, a majority of the accelerated tax depreciation and substantially all of the ITCs. After the fund investor receives its contractual rate of return or after the specified time period, we receive substantially all of the value attributable to the remaining customer payments and SREC sales.

Included within the Partnership Flips is the cash equity financing we entered into in December 2016. We pooled and transferred our interests in certain financing funds into a special purpose entity ("SPE") with a new investor. We did not recognize a gain or loss on the transfer of its interests in the financing funds and continue to consolidate the financing funds. The SPE’s assets and cash flows are not available to our other creditors, and the investor has no recourse to our other assets.

Under our partnership flip structures, we have determined that we control the partnership entity which is a variable interest entity ("VIE"), and accordingly we consolidate the entity and record the investor's interest as either noncontrolling interests or redeemable noncontrolling interests in our consolidated balance sheets.

**Inverted Leases.** Under our inverted lease structure, we and the fund investor set up a multi-tiered investment vehicle that is comprised of two partnership entities which facilitate the pass through of the tax benefits to the fund investors. In this structure we contribute solar energy systems to an "owner" partnership entity in exchange for interests in the owner partnership and the fund investors contribute cash to a "tenant" partnership in exchange for interests in the tenant partnership, which in turn makes an investment in the owner partnership entity in exchange for interests in the owner partnership. The owner partnership uses the cash contributions received from the tenant partnership to purchase systems from us and/or fund installation of such systems. Under our existing JV inverted lease structure, a substantial portion of the value generated by the solar energy systems is provided to the fund investor for a specified period of time, which is generally based upon the period of time corresponding to the expiry of the recapture period associated with the ITCs. After that point in time, we receive substantially all of the value attributable to the long-term recurring customer payments and the other incentives. Generally, under the terms of each agreement, the investors' contributions include the value of ITCs earned or grants to be received by the fund investor. Any other proceeds are allocated on a pro rata basis to the fund investor and us in accordance with their ownership percentages. Since Sunrun has the power to control both the owner and tenant entities, both entities are included in our consolidated financial statements.

We also have one JV inverted lease fund whereby we have a pro rata interest in the entity and we account for the noncontrolling interest's share of income on a pro rata basis. Accordingly, the noncontrolling interest of this fund is carried on our balance sheet at the cumulative amount of capital contributions, reduced by cumulative distributions paid to the investor, as well as the pro rata share of their income. Under our JV inverted lease structure, we have determined that we control each VIE, and accordingly we consolidate the entity and record investor's interest as a noncontrolling interest or redeemable noncontrolling interest.

For all of our partnership flips and JV inverted leases, the redeemable noncontrolling interest is carried on our balance sheet at the greater of the redemption value or the amount calculated under the HLBV method. The
HLBV method estimates the amount that, if the fund’s assets were hypothetically sold at their book value, the investor would be entitled to receive according to the liquidation waterfall in the partnership agreement.

Key Operating Metrics

We regularly review a number of metrics, including the following key operating metrics, to evaluate our business, measure our performance, identify trends affecting our business, formulate financial projections and make strategic decisions. Some of our key operating metrics are estimates that are based on our management’s beliefs and assumptions and on information currently available to management. Although we believe that we have a reasonable basis for each of these estimates, we caution you that these estimates are based on a combination of assumptions that may prove to be inaccurate over time. Any inaccuracies could be material to our actual results when compared to our calculations. Please see the section titled “Risk Factors” in this Annual Report on Form 10-K for more information. Furthermore, other companies may calculate these metrics differently than we do now or in the future, which would reduce their usefulness as a comparative measure.

- **Megawatts Deployed** represents the aggregate megawatt production capacity of our solar energy systems, whether sold directly to customers or subject to executed Customer Agreements, for which we have (i) confirmation that the systems are installed on the roof, subject to final inspection or (ii) in the case of certain system installations by our partners, accrued at least 80% of the expected project cost.

- **Gross Earning Assets** represents the net cash flows (discounted at 6%) we expect to receive during the initial term of our Customer Agreements (typically 20 or 25 years) for systems that have been deployed as of the measurement date, plus a discounted estimate of the value of the Customer Agreement renewal term or solar energy system purchase at the end of the initial term. Consistent with industry standards, we use a discount rate of 6%. We consider a discount rate of 6% to be appropriate and consistent with recent market transactions that demonstrate that a portfolio of residential solar homeowner contracts is an asset class that can be securitized successfully on a long-term basis, with a coupon of less than 5%. We calculate the Gross Earning Assets value of the purchase or renewal amount at the expiration of the initial contract term assuming either a system purchase or a five year renewal (for our 25-year Customer Agreements) or a 10-year renewal (for our 20-year Customer Agreements), in each case forecasting only a 30-year customer relationship (although the customer may renew for additional years, or thereafter purchase the system), at a contract rate equal to 90% of the customer’s contractual rate in effect at the end of the initial contract term. After the initial (generally 20 or 25-year) contract term, our Customer Agreements typically automatically renew on an annual basis and the rate is initially set at up to a 10% discount to then-prevailing power prices.

Gross Earning Assets is calculated net of estimated cash distributions to investors in consolidated joint ventures and estimated operating, maintenance and administrative expenses for systems deployed as of the measurement date. In calculating Gross Earning Assets, we deduct estimated cash distributions to our project equity financing providers. In calculating Gross Earning Assets, we do not deduct customer payments we are obligated to pass through to investors in pass-through financing obligations as these amounts are reflected on our balance sheet as long-term and short-term pass-through financing obligations, similar to the way that debt obligations are presented. In determining our finance strategy, we use pass-through financing obligations and long-term debt in an equivalent fashion as the schedule of payments of distributions to pass-through financing obligation investors is more similar to the payment of interest to lenders than the internal rates of return (IRRs) paid to investors in other tax equity structures.

- **Gross Earning Assets Under Energy Contract** represents the net cash flows during the initial term of our Customer Agreements (less substantially all value from SRECs prior to July 1, 2015), for systems deployed as of the measurement date.

- **Gross Earning Assets Value of Purchase or Renewal** is the forecasted net present value we would receive upon or following the expiration of the initial Customer Agreement term (either in the form of cash payments during any applicable renewal period or a system purchase at the end of the initial term), for systems deployed as of the measurement date.
Gross Earning Assets is forecasted as of a specific date. It is forward-looking, and we use judgment in developing the assumptions used to calculate it. Factors that could impact Gross Earning Assets include, but are not limited to, customer payment defaults, or declines in utility rates or early termination of a contract in certain circumstances, including prior to installation.

<table>
<thead>
<tr>
<th></th>
<th>As of December 31,</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2018</td>
<td>2017</td>
</tr>
<tr>
<td>Cumulative Megawatts Deployed (end of period)</td>
<td>1,575</td>
<td>1,202</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>As of December 31,</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(in thousands)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2018</td>
<td>2017</td>
</tr>
<tr>
<td>Gross Earning Assets Under Energy Contract</td>
<td>$2,099,532</td>
<td>$1,458,983</td>
</tr>
<tr>
<td>Gross Earning Assets Value of Purchase or Renewal</td>
<td>962,948</td>
<td>753,673</td>
</tr>
<tr>
<td>Gross Earning Assets</td>
<td>$3,062,480</td>
<td>$2,212,656</td>
</tr>
</tbody>
</table>

(1) In the fourth quarter of 2017, Gross Earnings Assets under Energy Contract and Total Gross Earning Assets were reduced by $13 million to reflect changes related to modifications to the Federal Tax Code for assets deployed through December 31, 2017, including a reduction held as a reserve pending final tax regulation guidance based on our best estimate of the potential effect.

The tables below provide a range of Gross Earning Asset amounts if different default, discount and purchase and renewal assumptions were used.

Gross Earning Assets Under Energy Contract:

<table>
<thead>
<tr>
<th>Default rate</th>
<th>As of December 31, 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Discount rate</td>
</tr>
<tr>
<td></td>
<td>(in thousands)</td>
</tr>
<tr>
<td>5%</td>
<td>$2,401,933</td>
</tr>
<tr>
<td>0%</td>
<td>$2,460,233</td>
</tr>
</tbody>
</table>

Gross Earning Assets Value of Purchase or Renewal:

<table>
<thead>
<tr>
<th>Purchase or Renewal rate</th>
<th>As of December 31, 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Discount rate</td>
</tr>
<tr>
<td></td>
<td>(in thousands)</td>
</tr>
<tr>
<td>80%</td>
<td>$1,271,197</td>
</tr>
<tr>
<td>90%</td>
<td>$1,457,854</td>
</tr>
<tr>
<td>100%</td>
<td>$1,644,511</td>
</tr>
</tbody>
</table>
Total Gross Earning Assets:

<table>
<thead>
<tr>
<th>Purchase or Renewal rate</th>
<th>4%</th>
<th>5%</th>
<th>6%</th>
<th>7%</th>
<th>8%</th>
</tr>
</thead>
<tbody>
<tr>
<td>80%</td>
<td>$3,731,430</td>
<td>$3,300,509</td>
<td>$2,939,145</td>
<td>$2,634,472</td>
<td>$2,376,011</td>
</tr>
<tr>
<td>90%</td>
<td>$3,918,087</td>
<td>$3,451,992</td>
<td>$3,062,479</td>
<td>$2,735,229</td>
<td>$2,458,578</td>
</tr>
<tr>
<td>100%</td>
<td>$4,104,745</td>
<td>$3,603,475</td>
<td>$3,185,832</td>
<td>$2,835,986</td>
<td>$2,541,145</td>
</tr>
</tbody>
</table>

Critical Accounting Policies and Estimates

Our discussion and analysis of our financial condition and results of operations are based upon our financial statements, which have been prepared in accordance with generally accepted accounting principles in the United States ("GAAP"). GAAP requires us to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenue, expenses and related disclosures. We base our estimates on historical experience and on various other assumptions that we believe to be reasonable under the circumstances. In many instances, we could have reasonably used different accounting estimates, and in other instances, changes in the accounting estimates are reasonably likely to occur from period-to-period. Actual results could differ significantly from our estimates. Our future financial statements will be affected to the extent that our actual results materially differ from these estimates. For further information on all of our significant accounting policies, see Note 2, Summary of Significant Accounting Policies, to our consolidated financial statements included elsewhere in this Annual Report on Form 10-K.

We believe that policies associated with our principles of consolidation, revenue recognition, impairment of long-lived assets, provision for income taxes and calculation of noncontrolling interests and redeemable noncontrolling interests have the greatest impact on our consolidated financial statements. Therefore, we consider these to be our critical accounting policies and estimates.
Principles of Consolidation

Our consolidated financial statements include our accounts and those of our subsidiaries in which we have a controlling financial interest. The typical condition for a controlling financial interest is holding a majority of the voting interests of an entity. However, a controlling financial interest may also exist in entities, such as VIEs, through arrangements that do not involve controlling financial interests. We consolidate any VIE of which we are the primary beneficiary, which is defined as the party that has (1) the power to direct the activities of a VIE that most significantly impact the VIE’s economic performance and (2) the obligation to absorb losses or receive benefits of the VIE that could potentially be significant to the VIE. We evaluate our relationships with our VIEs on an ongoing basis to determine whether we continue to be the primary beneficiary. Our financial statements reflect the assets and liabilities of VIEs that we consolidate. All intercompany transactions and balances have been eliminated in consolidation. For further information regarding consolidation of our investment funds, see “Investment Funds” above.

Revenue Recognition

We recognize revenue when control of goods or services is transferred to customers, in an amount that reflects the consideration we expect to be entitled to in exchange for those goods or services.

Customer Agreements and Incentives Revenue. Customer agreements and incentives revenue is primarily comprised of revenue from our Customer Agreements and sales of ITCs and SRECs to third parties.

We recognize revenue from a Customer Agreement when PTO for the applicable solar energy system is given by the local utility company or on the date daily operation commences if utility approval is not required. We recognize revenue evenly over the time that we satisfy our performance obligations over the initial term of the Customer Agreements. Customer Agreements typically have an initial term of 20 or 25 years. After the initial contract term, our Customer Agreements typically automatically renew on an annual basis and the rate is initially set at up to a 10% discount to then-prevailing power prices.

We also apply for and receive SRECs associated with the energy generated by our solar energy systems and sell them to third parties in certain jurisdictions. SREC revenue is estimated net of any variable consideration related to possible liquidated damages if we were to deliver fewer SRECs than contractually committed, and is generally recognized upon delivery of the SRECs to the counterparty.

Certain upfront payments related to Customer Agreements and SRECs are deemed to have a financing component, and therefore increase both revenue and interest expense by the same amount over the term of the related agreement. The additional revenue is included in the total transaction price to be recorded over the term of the agreement and is recognized based on the timing of the delivery. The interest expense is recognized based upon an amortization schedule which typically decreases throughout the term of the related agreement.

For pass-through financing obligation Funds, the value attributable to the ITCs are recognized in the period a solar system is granted PTO, at which point we have met our obligation to the investor. The ITCs are subject to recapture under the Internal Revenue Code (“Code”) if the underlying solar energy system either ceases to be a qualifying property or undergoes a change in ownership within five years of its placed-in-service date. The recapture amount decreases on the anniversary of the PTO date. We have not historically recorded a material recapture of ITCs, and do not expect to record a material recapture of ITCs in the future.

Consideration from customers is considered variable due to the performance guarantee under Customer Agreements and liquidated damage provisions under SREC contracts in the event minimum deliveries are not achieved. Performance guarantees provide a credit to the customer if the system's cumulative production, as measured on various PTO anniversary dates, is below our guarantee of a specified minimum. Revenue is recognized to the extent it is probable that a significant reversal of such revenue will not occur.

Solar Energy Systems and Product Sales. Solar energy systems sales are comprised of revenue from the sale of solar energy systems directly to homeowners. We recognize revenue from solar energy systems sold to homeowners when the solar energy system passes inspection by the authority having jurisdiction, which inspection generally occurs after installation but prior to PTO, at which time we have met the performance obligation in the contract.
Product sales revenue consists of revenue from the sale of solar panels, inverters, racking systems and other solar energy products sold to resellers, as well as the sale of customer leads to third parties, including our partners and other solar providers. Product sales revenue is recognized when control is transferred, generally upon shipment. Customer lead revenue is recognized at the time the lead is delivered.

Impairment of Long-Lived Assets

The carrying amounts of our long-lived assets, including solar energy systems and definite-lived intangible assets, are periodically reviewed for impairment whenever events or changes in circumstances indicate that the carrying value of these assets may not be recoverable or that the useful life is shorter than originally estimated. Factors that we consider in deciding when to perform an impairment review would include significant negative industry or economic trends, and significant changes or planned changes in our use of the assets. Recoverability of these assets is measured by comparison of the carrying amount of each asset group to the future undiscounted cash flows the asset is expected to generate over its remaining life. If the asset is considered to be impaired, the amount of any impairment is measured as the difference between the carrying value and the fair value of the impaired asset. If the useful life is shorter than originally estimated, we amortize the remaining carrying value over the new shorter useful life.

Provision for Income Taxes

We account for income taxes under an asset and liability approach. Deferred income taxes reflect the impact of temporary differences between assets and liabilities recognized for financial reporting purposes and the amounts recognized for income tax reporting purposes, net operating loss carryforwards and other tax credits measured by applying currently enacted tax laws. A valuation allowance is provided when necessary to reduce deferred tax assets to an amount that is more likely than not to be realized. We consider all available evidence, both positive and negative, including historical levels of income, estimates of future taxable income and ongoing tax planning strategies in assessing the need for a valuation allowance. As of December 31, 2018, we have recorded a valuation allowance of $10.5 million for certain federal tax credits, state tax credits and state deferred tax assets that we believe is more likely than not that the deferred tax assets will not be realized.

We sell solar energy systems to the investment funds. As the investment funds are consolidated by us, the gain on the sale of the solar energy systems is not recognized in the consolidated financial statements. However, this gain is recognized for tax reporting purposes. Since these transactions are intercompany sales for book purposes, before January 1, 2017, any tax expense incurred related to these intercompany sales was deferred and recorded as a prepaid tax asset and there was no recognition of a deferred tax asset related to our increased tax basis in the partnership as a result of such sales. The prepaid tax asset was amortized over the estimated useful life of the underlying solar energy systems which has been estimated to be 35 years. With the adoption of ASU 2016-16 on January 1, 2017 we reversed net prepaid tax assets of $378.5 million and recorded the gross deferred tax assets associated with the historical intercompany sales of solar energy systems, which in turn reduced the deferred tax liabilities on investment in partnerships by $378.2 million with the remaining $0.3 million being recorded as a cumulative effect of adoption in our Consolidated Statements of Redeemable Noncontrolling Interest and Stockholders’ Equity. The adoption did not have an impact on our Consolidated Statement of Operations.

We determine whether a tax position is more likely than not to be sustained upon examination, including resolution of any related appeals or litigation processes, based on the technical merits of the position. We use a two-step approach to recognizing and measuring uncertain tax positions. The first step is to evaluate the tax position for recognition by determining if the weight of available evidence indicates that it is more likely than not that the position will be sustained upon tax authority examination, including resolution of related appeals or litigation processes, if any. The second step is to measure the tax benefit as the largest amount that is more than 50% likely of being realized upon ultimate settlement.

Our policy is to include interest and penalties related to unrecognized tax benefits, if any, within the provision for taxes in the consolidated statements of operations.
Noncontrolling Interests and Redeemable Noncontrolling Interests

Our noncontrolling interests and redeemable noncontrolling interests represent fund investors’ interests in the net assets of certain investment funds, which we consolidate, that we have entered into in order to finance the costs of solar energy facilities under Customer Agreements. We have determined that the provisions in the contractual arrangements of the investment funds represent substantive profit-sharing arrangements, which gives rise to the noncontrolling interests and redeemable noncontrolling interests. We have further determined that for all but one of these arrangements, the appropriate methodology for attributing income and loss to the noncontrolling interests and redeemable noncontrolling interests each period is a balance sheet approach using the HLBV method.

Attributing income and loss to the noncontrolling interests and redeemable noncontrolling interests under the HLBV method requires the use of significant assumptions to calculate the amounts that fund investors would receive upon a hypothetical liquidation. Changes in these assumptions, including change in tax rates, can have a significant impact on the amount that fund investors would receive upon a hypothetical liquidation.

We classify certain noncontrolling interests with redemption features that are not solely within our control outside of permanent equity on our consolidated balance sheets. Redeemable noncontrolling interests are reported using the greater of their carrying value at each reporting date as determined by the HLBV method or their estimated redemption value in each reporting period. Estimating the redemption value of the redeemable noncontrolling interests requires the use of significant assumptions and estimates such as projected future cash flows at the time the redemption feature can be exercised.

We determine the net income (loss) attributable to common stockholders by deducting from net loss, the net loss attributable to noncontrolling interests and redeemable noncontrolling interests in these funds. The net loss attributable to noncontrolling interests and redeemable noncontrolling interests represents the fund investors’ allocable share in the results of operations of these investment funds. For these funds, we have determined that the provisions in the contractual arrangements represent substantive profit sharing arrangements, where the allocations to the partners sometimes differ from the stated ownership percentages. We have further determined that, for these arrangements, the appropriate methodology for attributing income and loss to the noncontrolling interests and redeemable noncontrolling interests each period is a balance sheet approach using the HLBV method. Under the HLBV method, the amounts of income and loss attributed to the noncontrolling interests and redeemable noncontrolling interests in the consolidated statements of operations reflect changes in the amounts the fund investors would hypothetically receive at each balance sheet date under the liquidation provisions of the contractual provisions of these funds, assuming the net assets of the respective investment funds were liquidated at the carrying value determined in accordance with GAAP. The fund investors’ interest in the results of operations of these investment funds is initially determined by calculating the difference in the noncontrolling interests and redeemable noncontrolling interests’ claim under the HLBV method at the start and end of each reporting period, after taking into account any contributions and distributions between the fund and the fund investors and subject to the redemption provisions in certain funds.

Results of Operations

The results of operations presented below should be reviewed in conjunction with the consolidated financial statements and notes thereto included elsewhere in this Annual Report on Form 10-K.

**(in thousands, except per share amounts)**

#### Revenue:

<table>
<thead>
<tr>
<th></th>
<th>2018</th>
<th>2017</th>
<th>Change</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Customer agreements and incentives</strong></td>
<td>$404,466</td>
<td>$234,276</td>
<td>$170,190</td>
<td>73%</td>
</tr>
<tr>
<td><strong>Solar energy systems and product sales</strong></td>
<td>355,515</td>
<td>298,266</td>
<td>57,249</td>
<td>19%</td>
</tr>
<tr>
<td><strong>Total revenue</strong></td>
<td>759,981</td>
<td>532,542</td>
<td>227,439</td>
<td>43%</td>
</tr>
</tbody>
</table>

#### Operating expenses:

<table>
<thead>
<tr>
<th></th>
<th>2018</th>
<th>2017</th>
<th>Change</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cost of customer agreements and incentives</strong></td>
<td>240,857</td>
<td>186,435</td>
<td>54,422</td>
<td>29%</td>
</tr>
<tr>
<td><strong>Cost of solar energy systems and product sales</strong></td>
<td>294,066</td>
<td>254,131</td>
<td>43,935</td>
<td>17%</td>
</tr>
<tr>
<td><strong>Sales and marketing</strong></td>
<td>207,232</td>
<td>146,426</td>
<td>60,806</td>
<td>41%</td>
</tr>
<tr>
<td><strong>Research and development</strong></td>
<td>18,844</td>
<td>10,079</td>
<td>8,765</td>
<td>87%</td>
</tr>
<tr>
<td><strong>General and administrative</strong></td>
<td>116,659</td>
<td>107,400</td>
<td>9,259</td>
<td>8.6%</td>
</tr>
<tr>
<td><strong>Amortization of intangible assets</strong></td>
<td>4,204</td>
<td>4,204</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td><strong>Total operating expenses</strong></td>
<td>881,862</td>
<td>713,675</td>
<td>168,187</td>
<td>23.5%</td>
</tr>
</tbody>
</table>

#### Loss from operations

<table>
<thead>
<tr>
<th>2018</th>
<th>2017</th>
<th>Change</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>$(121,881)</td>
<td>$(181,133)</td>
<td>$(59,252)</td>
<td>32.7%</td>
</tr>
</tbody>
</table>

#### Interest expense, net

<table>
<thead>
<tr>
<th>2018</th>
<th>2017</th>
<th>Change</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>131,771</td>
<td>92,255</td>
<td>39,516</td>
<td>42.9%</td>
</tr>
</tbody>
</table>

#### Other (income) expenses, net

<table>
<thead>
<tr>
<th>2018</th>
<th>2017</th>
<th>Change</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>(2,788)</td>
<td>1,874</td>
<td>(4,662)</td>
<td>250.0%</td>
</tr>
</tbody>
</table>

#### Net loss

<table>
<thead>
<tr>
<th>2018</th>
<th>2017</th>
<th>Change</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>$(250,864)</td>
<td>$(275,262)</td>
<td>$(24,398)</td>
<td>8.8%</td>
</tr>
</tbody>
</table>

#### Income tax expense

<table>
<thead>
<tr>
<th>2018</th>
<th>2017</th>
<th>Change</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>9,322</td>
<td>12,353</td>
<td>(3,031)</td>
<td>24.5%</td>
</tr>
</tbody>
</table>

#### Net loss attributable to common stockholders

<table>
<thead>
<tr>
<th>2018</th>
<th>2017</th>
<th>Change</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>$26,657</td>
<td>$125,489</td>
<td>$(98,832)</td>
<td>78.6%</td>
</tr>
</tbody>
</table>

#### Weighted average shares used to compute net income per share attributable to common stockholders

<table>
<thead>
<tr>
<th>2018</th>
<th>2017</th>
<th>Change</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>110,089</td>
<td>105,432</td>
<td>4,657</td>
<td>4.4%</td>
</tr>
</tbody>
</table>

Comparison of the Years Ended December 31, 2018 and 2017

### Revenue

Customer Agreements and Incentives: The $61.9 million increase in revenue from Customer Agreements was primarily due to both an increase in solar energy systems under Customer Agreements being placed in service in 2018 and a full year of revenue recognized in 2018 for systems placed in service in 2017 versus only a partial
amount of such revenue related to the period in which the assets were in service in 2017. The $108.3 million increase in revenue from incentives, consisting of ITCs and SRECs, was primarily due to the sale of ITCs related to a pass-through financing obligation fund opened in 2018.

**Solar Energy Systems and Product Sales.** Revenue from solar energy systems sales increased by $72.6 million compared to the prior year due to increased demand through retail partners. Product sales decreased by $15.3 million compared to the prior year primarily due to an increase in the volume of wholesale products sold in 2017 ahead of the anticipated Section 201 Module Tariffs.

**Operating Expenses**

<table>
<thead>
<tr>
<th>Year Ended December 31,</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2018</td>
</tr>
<tr>
<td>(in thousands)</td>
<td></td>
</tr>
<tr>
<td>Cost of customer agreements and incentives</td>
<td>$240,857</td>
</tr>
<tr>
<td>Cost of solar energy systems and product sales</td>
<td>294,066</td>
</tr>
<tr>
<td>Sales and marketing</td>
<td>207,232</td>
</tr>
<tr>
<td>Research and development</td>
<td>18,844</td>
</tr>
<tr>
<td>General and administrative expense</td>
<td>116,659</td>
</tr>
<tr>
<td>Amortization of intangible assets</td>
<td>4,204</td>
</tr>
<tr>
<td><strong>Total operating expenses</strong></td>
<td>$881,862</td>
</tr>
</tbody>
</table>

**Cost of Customer Agreements and Incentives.** The $54.4 million increase in Cost of customer agreements and incentives was primarily due to the increase in solar energy systems placed in service in 2018, plus a full year of costs recognized in 2018 for systems placed in service in 2017 versus only a partial amount of such expenses related to the period in which the assets were in service in 2017.

The Cost of customer agreements and incentives decreased to 60% of customer agreements and incentives revenue during 2018, from 80% during 2017 due to the $108.3 million increase in ITC incentives revenue under a pass-through financing obligation fund opened in 2018, which have no corresponding cost of sales.

**Cost of Solar Energy Systems and Product Sales.** The $39.9 million increase in Cost of solar energy systems and product sales was due to the corresponding changes in solar energy systems and product sales discussed above.

**Sales and Marketing Expense.** The $60.8 million increase in Sales and marketing expense was primarily attributable to an increase in headcount driving higher employee compensation. Included in sales and marketing expense is $8.6 million and $6.5 million of amortization of costs to obtain Customer Agreements for 2018 and 2017, respectively.

**Research and Development Expense.** The $3.8 million increase in Research and development was primarily attributable to hiring of personnel to support the growth of our business.

**General and Administrative Expense.** The $9.3 million increase in General and administrative expenses primarily related to an increase in headcount driving higher employee compensation. The remainder of the increase related to litigation and legal settlement activity.
Non-Operating Expenses

<table>
<thead>
<tr>
<th></th>
<th>Year Ended December 31,</th>
<th>Change</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2018</td>
<td>2017</td>
<td>$</td>
</tr>
<tr>
<td>Interest expense, net</td>
<td>$131,771</td>
<td>$92,255</td>
<td>$39,516</td>
</tr>
<tr>
<td>Other (income) expenses, net</td>
<td>(2,788)</td>
<td>1,874</td>
<td>(4,662)</td>
</tr>
<tr>
<td>Total interest and other expenses, net</td>
<td>$128,983</td>
<td>$94,129</td>
<td>$34,854</td>
</tr>
</tbody>
</table>

**Interest expense, net.** The increase in Interest expense, net of $39.5 million was related to additional non-recourse and pass-through financing obligation debt entered into in 2018. Included in net interest expense is $22.9 million and $21.1 million of non-cash interest recognized under Customer Agreements that have a significant financing component for 2018 and 2017, respectively.

**Other (income) expenses, net.** The increase in Other (income) expenses, net of $4.7 million relates primarily to a reclassification of $6.9 million of other comprehensive income to earnings as a result of a hedged forecasted transaction becoming probable to not occur due to a refinancing which repaid the hedged debt and terminated the related interest rate swap agreement during 2018, offset by a loss on extinguishment of the related debt.

Income Tax Expense

<table>
<thead>
<tr>
<th></th>
<th>Year Ended December 31,</th>
<th>Change</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2018</td>
<td>2017</td>
<td>$</td>
</tr>
<tr>
<td>Income tax expense</td>
<td>$9,322</td>
<td>$12,353</td>
<td>$ (3,031)</td>
</tr>
</tbody>
</table>

The tax expense at the statutory rate of 21.0% for 2018 was reduced by the allocation of the losses to noncontrolling interests and redeemable noncontrolling interests of 24.01% and change in valuation allowance of 3.04% and increased by other miscellaneous items of 2.33%. The statutory rate tax of 34.0% for 2017 was reduced by the allocation of losses to noncontrolling interests and redeemable noncontrolling interests of 51.03% and by other miscellaneous items of 3.4%. The decrease was offset by the tax impact of the change in the federal income tax rate of 15.93%.

The decrease in Income tax expense relates to a decrease in noncontrolling interests and redeemable noncontrolling interests and an increase in stock based compensation deductions. Given our net operating loss carryforwards as of December 31, 2018, we do not expect to pay income tax, including in connection with our 2018 income tax provision, until our net operating losses are fully utilized. As of the year ended December 31, 2018, our federal and state net operating loss carryforwards were $1.1 billion and $1.1 billion, respectively. If not utilized, the federal net operating loss will begin to expire in 2028 and the state net operating losses will begin to expire in 2024. Federal and certain state net operating loss carryforwards generated in 2018 have indefinite carryover periods and do not expire.

Net Loss Attributable to Noncontrolling Interests and Redeemable Noncontrolling Interests

<table>
<thead>
<tr>
<th></th>
<th>Year Ended December 31,</th>
<th>Change</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2018</td>
<td>2017</td>
<td>$</td>
</tr>
<tr>
<td>Net loss attributable to noncontrolling interests and redeemable noncontrolling interests</td>
<td>$(286,843)</td>
<td>$(413,104)</td>
<td>$126,261</td>
</tr>
</tbody>
</table>

The decrease in Net loss attributable to noncontrolling interests and redeemable noncontrolling interests was primarily a result of entering into a pass-through financing obligation fund in 2018, which does not use the HLBV method to determine the amount of net income or loss attributable to noncontrolling interests and redeemable
noncontrolling interests. Generally, new partnership funds generate larger losses attributable to noncontrolling interests and redeemable noncontrolling interests under the HLBV method in the first years after formation. In 2017, all new funds used the HLBV method.

Comparison of the Years Ended December 31, 2017 and 2016

Revenue

<table>
<thead>
<tr>
<th></th>
<th>Year Ended December 31,</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2017</td>
<td>2016</td>
</tr>
<tr>
<td>(in thousands)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Customer agreements</td>
<td>$210,753</td>
<td>$155,870</td>
</tr>
<tr>
<td>Incentives</td>
<td>23,523</td>
<td>35,756</td>
</tr>
<tr>
<td>Solar energy systems</td>
<td>234,276</td>
<td>191,626</td>
</tr>
<tr>
<td>Products</td>
<td>113,953</td>
<td>127,727</td>
</tr>
<tr>
<td>Solar energy systems and product sales</td>
<td>289,266</td>
<td>285,481</td>
</tr>
<tr>
<td>Total revenue</td>
<td>$532,542</td>
<td>$477,107</td>
</tr>
</tbody>
</table>

Customer Agreements and Incentives. The $54.9 million increase in revenue from Customer Agreements was primarily due to both an increase in solar energy systems under Customer Agreements being placed in service in 2017 and a full year of revenue recognized in 2017 for systems placed in service in 2016 versus only a partial amount of such revenue related to the period in which the assets were placed in service in 2016. The $12.2 million decrease in revenue from incentives, consisting of the sale of ITCs and SRECs, was primarily due to fewer sales of ITCs related to a pass-through financing obligation fund that opened in late 2015.

Solar Energy Systems and Product Sales. Revenue from solar energy systems sales decreased by $13.8 million compared to 2017 to softer customer demand in our retail sales channel following increased sales and marketing efforts in 2016. Product sales increased by $26.6 million compared to the prior year period primarily due to an increase in volume of wholesale products sold due to the Section 201 Module Tariffs, offset by industry-wide price decreases and a decrease in customer lead sales.

Operating Expenses

<table>
<thead>
<tr>
<th></th>
<th>Year Ended December 31,</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2017</td>
<td>2016</td>
</tr>
<tr>
<td>(in thousands)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cost of customer agreements and incentives</td>
<td>$186,435</td>
<td>$154,244</td>
</tr>
<tr>
<td>Cost of solar energy systems and product sales</td>
<td>254,131</td>
<td>239,381</td>
</tr>
<tr>
<td>Sales and marketing</td>
<td>146,426</td>
<td>168,737</td>
</tr>
<tr>
<td>Research and development</td>
<td>15,079</td>
<td>10,199</td>
</tr>
<tr>
<td>General and administrative expense</td>
<td>107,400</td>
<td>92,416</td>
</tr>
<tr>
<td>Amortization of intangible assets</td>
<td>4,204</td>
<td>4,206</td>
</tr>
<tr>
<td>Total operating expenses</td>
<td>$713,675</td>
<td>$669,183</td>
</tr>
</tbody>
</table>

Cost of Customer Agreements and Incentives. The $32.2 million increase in Cost of customer agreements and incentives was primarily due to the increase in solar energy systems placed in service in 2017, plus a full year of costs recognized in 2017 for systems placed in service in 2016 versus only a portion of such expenses related to the period in which the assets were in service in 2016.

The Cost of customer agreements and incentives remained consistent at 80% of Customer agreements and incentives revenue during 2017 and 2016.
Cost of Solar Energy Systems and Product Sales. The $14.8 million increase in Cost of solar energy systems and product sales was due to an increase in the product sales discussed above.

Sales and Marketing Expense. The $22.3 million decrease in Sales and marketing expense was primarily attributable to the decrease in our use of certain third party lead generation and direct mailer provider services as we continue to generate more leads internally as well as a decrease in personnel primarily in canvassing. Included in sales and marketing expense is $6.5 million and $4.3 million of amortization of costs to obtain Customer Agreements for 2017 and 2016, respectively.

Research and Development Expense. The $4.9 million increase in Research and development was primarily attributable to hiring of personnel to support the growth of our business.

General and Administrative Expense. The $15.0 million increase in General and administrative expenses primarily relates to hiring of personnel to support the growth of our business as well as an increase in professional services.

Non-Operating Expenses

<table>
<thead>
<tr>
<th>Year Ended December 31,</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2017</td>
</tr>
<tr>
<td>Interest expense, net</td>
<td>$92,255</td>
</tr>
<tr>
<td>Other expenses (income), net</td>
<td>$1,874</td>
</tr>
<tr>
<td>Total interest and other expenses, net</td>
<td>$94,129</td>
</tr>
</tbody>
</table>

Interest Expense, net. The increase in Interest expense, net of $18.9 million was related to additional non-recourse debt entered into in 2017. Included in net interest expense is $21.1 million and $19.4 million of non-cash interest recognized under Customer Agreements that have a significant financing component for 2017 and 2016, respectively.

Other expenses (income), net. The increase in Other expenses (income), net of $2.7 million was primarily due to a loss from the early extinguishment of certain non-recourse debt in 2017.

Income Tax Expense

<table>
<thead>
<tr>
<th>Year Ended December 31,</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2017</td>
</tr>
<tr>
<td>Income tax expense</td>
<td>$12,353</td>
</tr>
</tbody>
</table>

The tax expense at the statutory rate of 34.0% for 2017 was reduced by the allocation of the losses to noncontrolling interests and redeemable noncontrolling interests of 51.03% and by other miscellaneous items of 3.4%. The decrease was offset by the tax impact of the change in federal rate of 15.93%. The statutory rate tax of 34.0% for 2016 was reduced by the allocation of losses to noncontrolling interests and redeemable noncontrolling interests of 50.88% and by other miscellaneous items of 4.38%.

The decrease in Income tax expense relates to a decrease in the federal tax rate from the Tax Cuts and Jobs Act. Given our net operating loss carryforwards as of December 31, 2017, we do not expect to pay income tax, including in connection with our 2017 income tax provision, until our net operating losses are fully utilized. As of December 31, 2017, our federal and state net operating loss carryforwards were $720.1 million and $667.9 million, respectively. If not utilized, the federal net operating loss will begin to expire in 2028 and the state net operating losses will begin to expire in 2024.
# Net Loss Attributable to Noncontrolling Interests and Redeemable Noncontrolling Interests

<table>
<thead>
<tr>
<th>Net loss attributable to noncontrolling interests and redeemable noncontrolling interests</th>
<th>Year Ended December 31, (in thousands)</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2017</td>
<td>2016</td>
</tr>
<tr>
<td>Net loss attributable to noncontrolling interests and redeemable noncontrolling interests</td>
<td>$ (413,104)</td>
<td>$ (395,968)</td>
</tr>
</tbody>
</table>

The increase in Net loss attributable to noncontrolling interests and redeemable noncontrolling interests was primarily a result of the addition of six investment funds in 2017, which use the HLBV method to determine the amount of net income or loss attributable to noncontrolling interests and redeemable noncontrolling interests, which generally allocates more loss to the noncontrolling interest in the first several years after fund formation.
Liquidity and Capital Resources

As of December 31, 2018, we had cash of $226.6 million, which consisted of cash held in checking and savings accounts with financial institutions. We finance our operations mainly through a variety of financing fund arrangements that we have formed with fund investors, borrowings, cash generated from our sources of revenue and proceeds from secured credit facilities arrangements with a syndicate of banks for up to $255.0 million and from secured, long-term non-recourse loan arrangements for up to $121.4 million. Our principal uses of cash are funding our business, including the costs of acquisition and installation of solar energy systems, satisfaction of our obligations under our debt instruments and other working capital requirements. As of December 31, 2018, we have outstanding borrowings of $247.0 million on our $250.0 million corporate bank line of credit maturing in April 2020. Our business model requires substantial outside financing arrangements to grow the business and facilitate the deployment of additional solar energy systems. The solar energy systems that are operational are expected to generate a positive return rate over the term of the Customer Agreement, typically 20 or 25 years. However, in order to grow, we will continue to be dependent on financing from outside parties. If financing is not available to us on acceptable terms if and when needed, we may be required to reduce planned spending, which could have a material adverse effect on our operations. While there can be no assurances, we anticipate raising additional required capital from new and existing investors. We believe our cash, investment fund commitments and available borrowings as further described below will be sufficient to meet our anticipated cash needs for at least the next 12 months. The following table summarizes our cash flows for the periods indicated:

<table>
<thead>
<tr>
<th>Year Ended December 31,</th>
<th>2018</th>
<th>2017</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>(in thousands)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consolidated cash flow data:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Net cash used in operating activities</td>
<td>$62,461</td>
<td>$(96,103)</td>
<td>$(200,141)</td>
</tr>
<tr>
<td>Net cash used in investing activities</td>
<td>$(811,316)</td>
<td>$(777,319)</td>
<td>$(695,802)</td>
</tr>
<tr>
<td>Net cash provided by financing activities</td>
<td>936,386</td>
<td>890,849</td>
<td>899,145</td>
</tr>
<tr>
<td>Net increase in cash</td>
<td>$62,609</td>
<td>$17,427</td>
<td>$3,202</td>
</tr>
</tbody>
</table>

Operating Activities

During 2018, we used $62.5 million in net cash in operating activities. The driver of our operating cash inflow consists of payments received from customers as well as incentives. The driver of our operating cash outflows primarily relate to the costs of our revenues, as well as sales, marketing and general and administrative costs. During 2018, our operating cash outflows were $47.3 million from our net loss excluding non-cash and non-operating items. Changes in working capital resulted in a net cash outflow of $15.2 million.

During 2017, we used $96.1 million in net cash in operating activities. The driver of our operating cash inflow consists of payments received from customers. During 2017, our operating cash outflows were $105.7 million from our net loss excluding non-cash and non-operating items. The $105.7 million includes a final cash payment of $8.8 million related to our 2015 acquisition of Clean Energy Experts, LLC ("CEE"), a consumer demand and solar-lead generation company. Changes in working capital resulted in a net cash inflow of $9.6 million, primarily driven by accounts payable which in turn was offset by an increase in inventory due to additional module purchases ahead of the tariff effective in February 2018.

During 2016, we used $200.1 million in net cash from operating activities. During 2016, we had an increase in deferred revenue of approximately $29.3 million relating to upfront lease payments received from customers and solar energy system incentive rebate payments received from various state and local utilities. This increase was offset by our operating cash outflows of $163.8 million from our net loss excluding non-cash and non-operating items. Changes in accounts payable resulted in a cash outflow of $40.3 million. Changes in working capital, other than deferred revenue and accounts payable, resulted in a cash outflow of $25.3 million.
Investing Activities

During 2018, we used $811.3 million in cash in investing activities. Of this amount, we used $806.4 million to design, acquire and install solar energy systems and components under our long-term Customer Agreements, and $4.9 million for capitalized software projects and the acquisition of office equipment.

During 2017, we used $777.3 million in cash in investing activities. Of this amount, we used $769.4 million to design, acquire and install solar energy systems and components under our long-term Customer Agreements, and $7.9 million for capitalized software projects and the acquisition of office equipment.

During 2016, we used $696.8 million in cash in investing activities. Of this amount, we used $678.3 million to design, acquire and install solar energy systems and components under our long-term Customer Agreements, $12.5 million for capitalized software projects and the acquisition of office equipment and $5.0 million for additional purchase consideration for the acquisition of CEE.

Financing Activities

During 2018, we generated $936.4 million from financing activities. This was primarily driven by $483.8 million in net proceeds from fund investors, $438.1 million in proceeds from debt, net of debt issuance costs and repayments, offset by $9.0 million in repayments under finance lease obligations.

During 2017, we generated $890.8 million from financing activities. This was primarily driven by $511.2 million in net proceeds from fund investors, $374.7 million in proceeds from debt, net of debt issuance costs and repayments, offset by $9.8 million in repayments under finance lease obligations.

During 2016, we generated $899.1 million from financing activities. This was primarily driven by $550.0 million in net proceeds from fund investors, $345.8 million in proceeds from debt, net of debt issuance costs and repayments, offset by $12.8 million in repayments under finance lease obligations.

Debt, Equity, and Financing Fund Commitments

Debt Instruments

For a discussion of the terms and conditions of debt instruments and changes thereof in the period, refer to Note 11, Cash Equity Financing and Note 12, Indebtedness, to our consolidated financial statements included elsewhere in this Annual Report on Form 10-K.

Equity Instruments

Warrant. In August 2017, we entered into an agreement with an affiliate ("Contractor") of Comcast Corporation ("Comcast") whereby Contractor will receive lead or sales fees for new customers it brings to us over a 40-month term. We also issued Comcast a warrant to purchase up to 11,793,355 shares of our common stock, at an exercise price of $0.01 per warrant share. The warrant would initially vest 50.05% when both (i) Contractor has earned a lead or sales fee with respect to 30,000 of installed solar energy systems, and (ii) Contractor or its affiliates have spent at least $10.0 million in marketing and sales in connection with the agreement. Thereafter, the warrant would vest in five additional increments for each additional 6,000 installed solar energy systems. On November 7, 2018 the warrant vesting schedule was modified so that it will initially vest either (i) as to 10.0% if Contractor has earned a lead or sales fee with respect to 6,000 of installed solar energy systems by September 30, 2019 or (ii) as to 13.3% if Contractor has earned a lead or sales fee with respect to 8,000 of installed solar energy systems by December 31, 2019, provided that, in either case, Contractor or its affiliates have spent at least $25.0 million in marketing and sales in connection with the agreement. Thereafter, the warrant will vest in additional 8.3% increments for each additional 5,000 installed solar energy systems. If the initial vesting conditions have not been met by December 31, 2019, the Warrant will expire.
**Investment Fund Commitments**

As of December 31, 2018, we had undrawn committed capital of approximately $205.8 million which may only be used to purchase and install solar energy systems. We intend to establish new investment funds in the future, and we may also use debt, equity or other financing strategies to finance our business.

For a discussion of our cash equity financing, refer to Note 11, Cash Equity Financing, to our consolidated financial statements included elsewhere in this Annual Report on Form 10-K.

**Contractual Obligations and Other Commitments**

The following table summarizes our contractual obligations as of December 31, 2018:

<table>
<thead>
<tr>
<th>Payments Due by Period</th>
<th>Less Than 1 Year</th>
<th>1 to 3 Years</th>
<th>3 to 5 Years</th>
<th>More Than 5 Years</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Contractual Obligations:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Debt obligations (including future interest)</td>
<td>$140,819</td>
<td>$653,377</td>
<td>$472,869</td>
<td>$1,063,847</td>
<td>$2,330,912</td>
</tr>
<tr>
<td>Purchase commitments</td>
<td>—</td>
<td>135,350</td>
<td>—</td>
<td>—</td>
<td>135,350</td>
</tr>
<tr>
<td>Distributions payable to noncontrolling interests and redeemable noncontrolling interests</td>
<td>15,847</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>15,847</td>
</tr>
<tr>
<td>Financing lease obligations (including accrued interest)</td>
<td>9,742</td>
<td>7,909</td>
<td>1,560</td>
<td>949</td>
<td>20,160</td>
</tr>
<tr>
<td>Operating lease obligations, net of sublease income</td>
<td>8,720</td>
<td>8,992</td>
<td>4,451</td>
<td>25</td>
<td>22,188</td>
</tr>
<tr>
<td><strong>Total contractual obligations</strong></td>
<td>$175,128</td>
<td>$805,628</td>
<td>$478,880</td>
<td>$1,064,821</td>
<td>$2,524,457</td>
</tr>
</tbody>
</table>

(1) The foregoing table does not include the amounts we could be required to expend under our redemption obligations discussed above.

**Off Balance Sheet Arrangements**

We include in our consolidated financial statements all assets and liabilities and results of operations of investment fund arrangements that we have entered into. We do not have any off-balance sheet arrangements.

**Recent Accounting Pronouncements**

See Note 2, Summary of Significant Accounting Policies, to our consolidated financial statement included elsewhere in this Annual Report on Form 10-K.

**Item 7A. Quantitative and Qualitative Disclosures About Market Risk**

We are exposed to certain market risks in the ordinary course of our business. Our primary exposure includes changes in interest rates because certain borrowings bear interest at floating rates based on LIBOR plus a specified margin. We sometimes manage our interest rate exposure on floating-rate debt by entering into derivative instruments to hedge all or a portion of our interest rate exposure in certain debt facilities. We do not enter into any derivative instruments for trading or speculative purposes. Changes in economic conditions could result in higher interest rates, thereby increasing our interest expense and operating expenses and reducing funds available for capital investments, operations and other purposes. A hypothetical 10% increase in our interest rates on our variable rate debt facilities would have increased our interest expense by $2.9 million and $2.6 million for the year ended December 31, 2018 and 2017, respectively.

59
### Item 8. Financial Statements and Supplementary Data.

**INDEX TO CONSOLIDATED FINANCIAL STATEMENTS**

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reports of Independent Registered Public Accounting Firm</td>
<td>61</td>
</tr>
<tr>
<td>Consolidated Balance Sheets</td>
<td>64</td>
</tr>
<tr>
<td>Consolidated Statements of Operations</td>
<td>66</td>
</tr>
<tr>
<td>Consolidated Statements of Comprehensive Income</td>
<td>67</td>
</tr>
<tr>
<td>Consolidated Statements of Redeemable Noncontrolling Interests and Stockholders' Equity</td>
<td>68</td>
</tr>
<tr>
<td>Consolidated Statements of Cash Flows</td>
<td>69</td>
</tr>
<tr>
<td>Notes to Consolidated Financial Statements</td>
<td>70</td>
</tr>
</tbody>
</table>
Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Sunrun Inc. (the Company) as of December 31, 2018 and 2017, the related consolidated statements of operations, comprehensive income, redeemable noncontrolling interests and stockholders’ equity, and cash flows for each of the three years in the period ended December 31, 2018, and the related notes (collectively referred to as the “consolidated financial statements”). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company at December 31, 2018 and 2017, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2018, in conformity with U.S. generally accepted accounting principles.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Company’s internal control over financial reporting as of December 31, 2018, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework), and our report dated February 28, 2019 expressed an unqualified opinion thereon.

Change in Accounting Principles

As discussed in Note 2 to the consolidated financial statements, the Company has changed its method of accounting for revenue from contracts with customers and for accounting for leases due to the 2018 adoption of the new revenue standard and new lease standard, respectively. The Company adopted the new revenue standard using the full retrospective approach and adopted the new lease standard using a modified retrospective approach at the beginning of the earliest comparative period presented in the financial statements.

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company’s financial statements based on our audits. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

/s/ Ernst & Young LLP

We have served as the Company’s auditor since 2010.

San Francisco, California
February 28, 2019
Opinion on Internal Control over Financial Reporting

We have audited Sunrun Inc.’s internal control over financial reporting as of December 31, 2018, based on criteria established in Internal Control - Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) (the COSO criteria). In our opinion, Sunrun Inc. (the Company) maintained, in all material respects, effective internal control over financial reporting as of December 31, 2018, based on the COSO criteria.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the 2018 consolidated financial statements of the Company, and the related notes (collectively referred to as the “consolidated financial statements”) and our report dated February 28, 2019 expressed an unqualified opinion on those financial statements and included an explanatory paragraph related to the Company’s change in method of accounting for revenue from contracts with customers and for accounting for leases due to the 2018 adoption of the new revenue standard and new lease standard, respectively.

Basis for Opinion

The Company’s management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting included in the accompanying Management’s Report on Internal Control Over Financial Reporting. Our responsibility is to express an opinion on the Company’s internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects.

Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

Definition and Limitations of Internal Control Over Financial Reporting

A company’s internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company’s internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company’s assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.
We have served as the Company’s auditor since 2010.

San Francisco, California
February 28, 2019
### Sunrun Inc.
#### Consolidated Balance Sheets
**(In Thousands, Except Share Par Values)**

<table>
<thead>
<tr>
<th></th>
<th>As of December 31,</th>
<th></th>
<th>As Recast</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2018</td>
<td>2017</td>
<td></td>
</tr>
<tr>
<td><strong>Assets</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Current assets:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cash</td>
<td>$226,625</td>
<td>$202,525</td>
<td></td>
</tr>
<tr>
<td>Restricted cash</td>
<td>77,626</td>
<td>39,265</td>
<td></td>
</tr>
<tr>
<td>Accounts receivable</td>
<td>66,435</td>
<td>60,165</td>
<td></td>
</tr>
<tr>
<td>State tax credits</td>
<td>2,697</td>
<td>11,085</td>
<td></td>
</tr>
<tr>
<td>Inventories</td>
<td>79,467</td>
<td>94,427</td>
<td></td>
</tr>
<tr>
<td>Prepaid expenses</td>
<td>8,563</td>
<td>9,202</td>
<td></td>
</tr>
<tr>
<td>Total current assets</td>
<td>461,413</td>
<td>416,863</td>
<td></td>
</tr>
<tr>
<td>Restricted cash</td>
<td>148</td>
<td>—</td>
<td></td>
</tr>
<tr>
<td>Solar energy systems</td>
<td>3,820,017</td>
<td>3,161,570</td>
<td></td>
</tr>
<tr>
<td>Property and equipment</td>
<td>34,893</td>
<td>36,402</td>
<td></td>
</tr>
<tr>
<td>Intangible assets</td>
<td>10,088</td>
<td>14,294</td>
<td></td>
</tr>
<tr>
<td>Goodwill</td>
<td>87,543</td>
<td>87,543</td>
<td></td>
</tr>
<tr>
<td>Other assets</td>
<td>335,685</td>
<td>246,484</td>
<td></td>
</tr>
<tr>
<td><strong>Total assets</strong></td>
<td>$4,749,787</td>
<td>$3,963,136</td>
<td></td>
</tr>
</tbody>
</table>

| **Liabilities and total equity** | | |
| **Current liabilities:** | | |
| Accounts payable       | $131,278                | $115,193 |          |
| Distributions payable  | 15,847                  | 13,583   |          |
| Accrued expenses and other liabilities | 96,636 | 97,230 | |
| Deferred revenue, current portion | 47,407 | 42,609 | |
| Deferred grants, current portion | 7,885  | 8,193   |          |
| Finance lease obligations, current portion | 9,193 | 7,421 | |
| Non-recourse debt, current portion | 35,484 | 21,529 | |
| Pass-through financing obligation, current portion | 26,461 | 5,387 | |
| **Total current liabilities** | 372,191 | 311,145 |          |
| Deferred revenue, net of current portion | 544,216 | 522,243 | |
| Deferred grants, net of current portion | 221,739 | 227,519 | |
| Finance lease obligations, net of current portion | 9,992 | 5,811 | |
| Recourse debt          | 247,000                  | 247,000  |          |
| Non-recourse debt, net of current portion | 1,466,438 | 1,026,416 | |
| Pass-through financing obligation, net of current portion | 337,282 | 132,823 | |
| Other liabilities      | 48,210                   | 42,743   |          |
| Deferred tax liabilities | 93,633              | 83,119   |          |
| **Total liabilities**  | 3,340,703                | 2,598,819|          |
| Commitments and contingencies (Note 20) | 126,302 | 123,801 | |
| Redeemable noncontrolling interests | 948,707 | 881,582 | |
| **Stockholders’ equity:** | | |
| Preferred stock, $0.0001 par value—authorized, 200,000 shares as of December 31, 2018 and 2017; no shares issued and outstanding | — | — | |
| Common stock, $0.0001 par value—authorized, 2,000,000 shares as of December 31, 2018 and 2017; issued and outstanding, 113,149 and 107,350 shares as of December 31, 2018 and 2017, respectively | 11 | 11 | |
| Additional paid-in capital | 722,429 | 662,950 | |
| Accumulated other comprehensive loss | (3,124) | (4,113) | |
| Retained earnings | 229,391 | 202,734 | |
| **Total stockholders’ equity** | 948,707 | 881,582 | |
| Noncontrolling interests | 334,075 | 358,934 | |
| **Total equity**       | 1,282,782                | 1,240,516|          |
| **Total liabilities, redeemable noncontrolling interests and total equity** | 4,749,787 | 3,963,136 | |

---

64
The Company’s consolidated assets as of December 31, 2018 and 2017 include $2,905,295 and $2,568,378, respectively, in assets of variable interest entities, or “VIEs”, that can only be used to settle obligations of the VIEs. Solar energy systems, net, as of December 31, 2018 and 2017 were $2,712,377 and $2,385,329, respectively; cash as of December 31, 2018 and 2017 were $105,494 and $118,352, respectively; restricted cash as of December 31, 2018 and 2017 were $2,071 and $2,699, respectively; accounts receivable, net as of December 31, 2018 and 2017 were $18,539 and $18,786, respectively; prepaid expenses and other current assets as of December 31, 2018 and 2017 were $387 and $917, respectively and other assets as of December 31, 2018 and 2017 were $66,427 and $42,295, respectively. The Company’s consolidated liabilities as of December 31, 2018 and 2017 include $660,758 and $677,955, respectively, in liabilities of VIEs whose creditors have no recourse to the Company. These liabilities include accounts payable as of December 31, 2018 and 2017 of $12,136 and $15,929, respectively; distributions payable to noncontrolling interests and redeemable noncontrolling interests as of December 31, 2018 and 2017 of $15,797 and $13,526, respectively; accrued expenses and other liabilities as of December 31, 2018 and 2017 of $7,122 and $5,200, respectively; deferred revenue as of December 31, 2018 and 2017 of $396,920 and $409,761, respectively; deferred grants as of December 31, 2018 and 2017 of $29,229 and $30,406, respectively; non-recourse debt as of December 31, 2018 and 2017 of $190,711 and $201,285, respectively; and other liabilities as of December 31, 2018 and December 31, 2017 of $8,843 thousand and $1,848, respectively.

The accompanying notes are an integral part of these consolidated financial statements.
<table>
<thead>
<tr>
<th>Year Ended December 31,</th>
<th>2018 As Recast</th>
<th>2017 As Recast</th>
<th>2016 As Recast</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Revenue:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Customer agreements and incentives</td>
<td>$ 404,466</td>
<td>$ 234,276</td>
<td>$ 191,626</td>
</tr>
<tr>
<td>Solar energy systems and product sales</td>
<td>355,515</td>
<td>298,266</td>
<td>285,481</td>
</tr>
<tr>
<td><strong>Total revenue</strong></td>
<td>$ 759,981</td>
<td>$ 532,542</td>
<td>$ 477,107</td>
</tr>
<tr>
<td><strong>Operating expenses:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cost of customer agreements and incentives</td>
<td>240,857</td>
<td>186,435</td>
<td>154,244</td>
</tr>
<tr>
<td>Cost of solar energy systems and product sales</td>
<td>294,066</td>
<td>254,131</td>
<td>239,381</td>
</tr>
<tr>
<td>Sales and marketing</td>
<td>207,232</td>
<td>146,426</td>
<td>168,737</td>
</tr>
<tr>
<td>Research and development</td>
<td>18,844</td>
<td>15,079</td>
<td>10,199</td>
</tr>
<tr>
<td>General and administrative</td>
<td>116,659</td>
<td>107,400</td>
<td>92,416</td>
</tr>
<tr>
<td>Amortization of intangible assets</td>
<td>4,204</td>
<td>4,204</td>
<td>4,206</td>
</tr>
<tr>
<td><strong>Total operating expenses</strong></td>
<td>$ 881,862</td>
<td>$ 713,675</td>
<td>$ 669,183</td>
</tr>
<tr>
<td><strong>Loss from operations</strong></td>
<td>(121,881)</td>
<td>(181,133)</td>
<td>(192,076)</td>
</tr>
<tr>
<td>Interest expense, net</td>
<td>131,771</td>
<td>92,255</td>
<td>73,340</td>
</tr>
<tr>
<td>Other (income) expenses, net</td>
<td>(2,788)</td>
<td>1,874</td>
<td>(840)</td>
</tr>
<tr>
<td><strong>Loss before income taxes</strong></td>
<td>(250,864)</td>
<td>(275,262)</td>
<td>(264,576)</td>
</tr>
<tr>
<td>Income tax expense</td>
<td>9,322</td>
<td>12,353</td>
<td>56,263</td>
</tr>
<tr>
<td><strong>Net loss</strong></td>
<td>(260,186)</td>
<td>(287,615)</td>
<td>(320,839)</td>
</tr>
<tr>
<td>Net loss attributable to noncontrolling interests and redeemable noncontrolling interests</td>
<td>(286,843)</td>
<td>(413,104)</td>
<td>(395,968)</td>
</tr>
<tr>
<td><strong>Net income attributable to common stockholders</strong></td>
<td>$ 26,657</td>
<td>$ 125,489</td>
<td>$ 75,129</td>
</tr>
<tr>
<td><strong>Net income per share attributable to common stockholders</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Basic</td>
<td>$ 0.24</td>
<td>$ 1.19</td>
<td>$ 0.73</td>
</tr>
<tr>
<td>Diluted</td>
<td>$ 0.23</td>
<td>$ 1.16</td>
<td>$ 0.72</td>
</tr>
</tbody>
</table>

| Weighted average shares used to compute net income per share attributable to common stockholders |             |                |                |
| Basic                   | 110,089       | 105,432        | 102,367        |
| Diluted                 | 117,112       | 108,206        | 104,964        |

The accompanying notes are an integral part of these consolidated financial statements.
<table>
<thead>
<tr>
<th>Year Ended December 31,</th>
<th>2018</th>
<th>2017</th>
<th>As Recast</th>
<th>2016</th>
<th>As Recast</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net income attributable to common stockholders</td>
<td>$26,657</td>
<td>$125,489</td>
<td>$75,129</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unrealized gain (loss) on derivatives, net of income taxes</td>
<td>6,187</td>
<td>(5,694)</td>
<td>335</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interest (expense) income on derivatives recognized into earnings, net of income taxes</td>
<td>(5,198)</td>
<td>1,144</td>
<td>1,023</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other comprehensive income (loss)</td>
<td>989</td>
<td>(4,550)</td>
<td>1,358</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Comprehensive income</td>
<td>$27,646</td>
<td>$120,939</td>
<td>$76,487</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The accompanying notes are an integral part of these consolidated financial statements.
## Sunrun Inc.

### Consolidated Statements of Redeemable Noncontrolling Interests and Stockholders' Equity

(In Thousands)

<table>
<thead>
<tr>
<th>Redemable Noncontrolling Interests</th>
<th>Preferred Stock</th>
<th>Common Stock</th>
<th>Additional Paid-in Capital</th>
<th>Accumulated Other Comprehensive Income (Loss)</th>
<th>Retained Earnings (Accumulated Deficit)</th>
<th>Total Stockholders' Equity</th>
<th>Noncontrolling Interests</th>
<th>Total Equity</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Balance at December 31, 2015</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(as reported)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$147,139</td>
</tr>
<tr>
<td>Cumulative effect of adoption of new ASUs (No. 2014-09 and No. 2016-02)</td>
<td>5,710</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$659,560</td>
</tr>
<tr>
<td><strong>Balance at December 31, 2015</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$152,849</td>
</tr>
<tr>
<td>(as recast)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exercise of stock options</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$101,282</td>
</tr>
<tr>
<td>Issuance of restricted stock units, net of tax withholdings</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$5,416</td>
</tr>
<tr>
<td>Shares issued in connection with the Employee Stock Purchase Plan</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$2,432</td>
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<tr>
<td>Stock-based compensation</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td>$18,817</td>
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<tr>
<td>Contributions from noncontrolling interests and redeemable noncontrolling interests</td>
<td>123,023</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$450,519</td>
</tr>
<tr>
<td>Contributions from noncontrolling interests and redeemable noncontrolling interests (13,606)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exercise of stock options</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$1,984</td>
</tr>
<tr>
<td>Issuance of restricted stock units, net of tax withholdings</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$3,569</td>
</tr>
<tr>
<td>Shares issued in connection with the Employee Stock Purchase Plan</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$1,115</td>
</tr>
<tr>
<td>Stock-based compensation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$22,088</td>
</tr>
<tr>
<td>Acquisition of noncontrolling interests (37,919)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contributions from noncontrolling interests and redeemable noncontrolling interests</td>
<td>128,052</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$469,617</td>
</tr>
<tr>
<td>Contributions from noncontrolling interests and redeemable noncontrolling interests (14,769)</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exercise of stock options</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$1,984</td>
</tr>
<tr>
<td>Issuance of restricted stock units, net of tax withholdings</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$3,569</td>
</tr>
<tr>
<td>Shares issued in connection with the Employee Stock Purchase Plan</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$1,115</td>
</tr>
<tr>
<td>Stock-based compensation</td>
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<td>$22,088</td>
</tr>
<tr>
<td>Acquisition of noncontrolling interests (37,919)</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contributions from noncontrolling interests and redeemable noncontrolling interests</td>
<td>128,052</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$469,617</td>
</tr>
<tr>
<td>Contributions from noncontrolling interests and redeemable noncontrolling interests (14,769)</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exercise of stock options</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$1,984</td>
</tr>
<tr>
<td>Issuance of restricted stock units, net of tax withholdings</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$3,569</td>
</tr>
<tr>
<td>Shares issued in connection with the Employee Stock Purchase Plan</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$1,115</td>
</tr>
<tr>
<td>Stock-based compensation</td>
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<td></td>
<td></td>
<td></td>
<td>$22,088</td>
</tr>
<tr>
<td>Contributions from noncontrolling interests and redeemable noncontrolling interests</td>
<td>111,125</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$234,022</td>
</tr>
<tr>
<td>Contributions from noncontrolling interests and redeemable noncontrolling interests (11,057)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exercise of stock options</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$17,178</td>
</tr>
<tr>
<td>Issuance of restricted stock units, net of tax withholdings</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$10,102</td>
</tr>
<tr>
<td>Shares issued in connection with the Employee Stock Purchase Plan</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$26,657</td>
</tr>
<tr>
<td>Stock-based compensation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$27,857</td>
</tr>
<tr>
<td>Contributions from noncontrolling interests and redeemable noncontrolling interests</td>
<td>111,125</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$234,022</td>
</tr>
</tbody>
</table>

The accompanying notes are an integral part of these consolidated financial statements.
Sunrun Inc.
Consolidated Statements of Cash Flows
(In Thousands)

<table>
<thead>
<tr>
<th>Year Ended December 31,</th>
<th>2018 As Recast</th>
<th>2017 As Recast</th>
<th>2016 As Recast</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating activities:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Net loss</td>
<td>$ (260,186)</td>
<td>$ (287,615)</td>
<td>$ (320,839)</td>
</tr>
<tr>
<td>Adjustments to reconcile net loss to net cash used in operating activities:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Depreciation and amortization, net of amortization of deferred grants</td>
<td>156,007</td>
<td>128,687</td>
<td>98,493</td>
</tr>
<tr>
<td>Deferred income taxes</td>
<td>9,322</td>
<td>12,353</td>
<td>56,263</td>
</tr>
<tr>
<td>Stock-based compensation expense</td>
<td>27,856</td>
<td>22,042</td>
<td>18,723</td>
</tr>
<tr>
<td>Interest on pass-through financing obligations</td>
<td>19,205</td>
<td>12,629</td>
<td>12,757</td>
</tr>
<tr>
<td>Reduction in pass-through financing obligations</td>
<td>(25,005)</td>
<td>(18,285)</td>
<td>(44,913)</td>
</tr>
<tr>
<td>Other noncash losses and expenses</td>
<td>25,484</td>
<td>24,471</td>
<td>15,705</td>
</tr>
<tr>
<td>Changes in operating assets and liabilities:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accounts receivable</td>
<td>(5,707)</td>
<td>(9,409)</td>
<td>(1,973)</td>
</tr>
<tr>
<td>Inventories</td>
<td>14,960</td>
<td>(27,101)</td>
<td>4,042</td>
</tr>
<tr>
<td>Prepaid and other assets</td>
<td>(75,924)</td>
<td>(51,633)</td>
<td>(52,226)</td>
</tr>
<tr>
<td>Accounts payable</td>
<td>8,848</td>
<td>47,837</td>
<td>(12,757)</td>
</tr>
<tr>
<td>Accrued expenses and other liabilities</td>
<td>15,286</td>
<td>9,219</td>
<td>24,868</td>
</tr>
<tr>
<td>Deferred revenue</td>
<td>27,393</td>
<td>40,712</td>
<td>20,295</td>
</tr>
<tr>
<td>Net cash used in operating activities</td>
<td>(62,461)</td>
<td>(96,103)</td>
<td>(200,141)</td>
</tr>
<tr>
<td>Investing activities:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Payments for the costs of solar energy systems</td>
<td>(806,365)</td>
<td>(769,363)</td>
<td>(678,258)</td>
</tr>
<tr>
<td>Purchases of property and equipment</td>
<td>(4,951)</td>
<td>(7,956)</td>
<td>(12,544)</td>
</tr>
<tr>
<td>Business acquisition</td>
<td>—</td>
<td>—</td>
<td>(5,000)</td>
</tr>
<tr>
<td>Net cash used in investing activities</td>
<td>(811,316)</td>
<td>(777,319)</td>
<td>(693,802)</td>
</tr>
<tr>
<td>Financing activities:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proceeds from state tax credits, net of recapture</td>
<td>10,887</td>
<td>13,773</td>
<td>9,081</td>
</tr>
<tr>
<td>Proceeds from issuance of recourse debt</td>
<td>17,000</td>
<td>170,400</td>
<td>458,400</td>
</tr>
<tr>
<td>Repayment of recourse debt</td>
<td>(17,000)</td>
<td>(167,400)</td>
<td>(411,400)</td>
</tr>
<tr>
<td>Proceeds from issuance of non-recourse debt</td>
<td>980,544</td>
<td>748,806</td>
<td>335,666</td>
</tr>
<tr>
<td>Repayment of non-recourse debt</td>
<td>(517,594)</td>
<td>(362,763)</td>
<td>(23,076)</td>
</tr>
<tr>
<td>Payment of debt fees</td>
<td>(24,849)</td>
<td>(14,392)</td>
<td>(13,741)</td>
</tr>
<tr>
<td>Proceeds from pass-through financing and other obligations</td>
<td>217,082</td>
<td>6,221</td>
<td>16,047</td>
</tr>
<tr>
<td>Payment of finance lease obligations</td>
<td>(9,025)</td>
<td>(9,836)</td>
<td>(12,759)</td>
</tr>
<tr>
<td>Contributions received from noncontrolling interests and redeemable noncontrolling interests</td>
<td>345,147</td>
<td>594,921</td>
<td>573,542</td>
</tr>
<tr>
<td>Distributions paid to noncontrolling interests and redeemable noncontrolling interests</td>
<td>(78,398)</td>
<td>(54,530)</td>
<td>(39,542)</td>
</tr>
<tr>
<td>Acquisition of noncontrolling interests</td>
<td>—</td>
<td>(35,386)</td>
<td>—</td>
</tr>
<tr>
<td>Proceeds from exercises of stock options, net of withholding taxes paid on restricted stock units</td>
<td>12,592</td>
<td>1,035</td>
<td>7,364</td>
</tr>
<tr>
<td>Offering costs paid related to initial public offering</td>
<td>—</td>
<td>—</td>
<td>(437)</td>
</tr>
<tr>
<td>Net cash provided by financing activities</td>
<td>936,386</td>
<td>890,849</td>
<td>890,145</td>
</tr>
<tr>
<td>Net change in cash and restricted cash</td>
<td>62,609</td>
<td>17,427</td>
<td>3,202</td>
</tr>
<tr>
<td>Cash and restricted cash, beginning of period</td>
<td>241,790</td>
<td>224,363</td>
<td>221,161</td>
</tr>
<tr>
<td>Cash and restricted cash, end of period</td>
<td>$ 304,399</td>
<td>$ 241,790</td>
<td>$ 224,363</td>
</tr>
</tbody>
</table>

Supplemental disclosures of cash flow information

| Cash paid for interest | $ 76,313 | $ 42,194 | $ 26,191 |
| Cash paid for taxes | — | — | — |

Supplemental disclosures of noncash investing and financing activities

| Purchases of solar energy systems and property and equipment included in accounts payable and accrued expenses | $ 27,169 | $ 19,625 | $ 18,547 |
| Purchases of solar energy systems included in non-recourse debt | — | $ 12,873 | — |
| Right-of-use assets obtained in exchange for finance lease liabilities | $ 14,302 | $ 650 | $ 12,501 |

The accompanying notes are an integral part of these consolidated financial statements.
Note 1. Organization

Sunrun Inc. ("Sunrun" or the "Company") was originally formed in 2007 as a California limited liability company, and was converted into a Delaware corporation in 2008. The Company is engaged in the design, development, installation, sale, ownership and maintenance of residential solar energy systems ("Projects") in the United States.

Sunrun acquires customers directly and through relationships with various solar and strategic partners ("Partners"). The Projects are constructed either by Sunrun or by Sunrun’s Partners and are owned by the Company. Sunrun’s customers enter into an agreement to utilize the solar system ("Customer Agreement") which typically has an initial term of 20 or 25 years. Sunrun monitors, maintains and insures the Projects. The Company also sells solar energy systems and products, such as panels and racking and solar leads generated to customers.

The Company has formed various subsidiaries ("Funds") to finance the development of Projects. These Funds, structured as limited liability companies, obtain financing from outside investors and purchase or lease Projects from Sunrun under master purchase or master lease agreements. The Company currently utilizes three legal structures in its investment Funds, which are referred to as: (i) pass-through financing obligations, (ii) partnership-flips and (iii) joint venture ("JV") inverted leases.

Note 2. Summary of Significant Accounting Policies

Basis of Presentation and Principles of Consolidation

The accompanying consolidated financial statements have been prepared in accordance with U.S. generally accepted accounting principles ("GAAP") and reflect the accounts and operations of the Company and those of its subsidiaries, including Funds, in which the Company has a controlling financial interest. The typical condition for a controlling financial interest ownership is holding a majority of the voting interests of an entity. However, a controlling financial interest may also exist in entities, such as variable interest entities ("VIEs"), through arrangements that do not involve controlling voting interests. In accordance with the provisions of Financial Accounting Standards Board ("FASB") Accounting Standards Codification Topic 810 ("ASC 810") Consolidation, the Company consolidates any VIE of which it is the primary beneficiary. The primary beneficiary, as defined in ASC 810, is the party that has (1) the power to direct the activities of a VIE that most significantly impact the VIE’s economic performance and (2) the obligation to absorb the losses of the VIE or the right to receive benefits from the VIE that could potentially be significant to the VIE. The Company evaluates its relationships with its VIEs on an ongoing basis to determine whether it continues to be the primary beneficiary. The consolidated financial statements reflect the assets and liabilities of VIEs that are consolidated. All intercompany transactions and balances have been eliminated in consolidation.

Reclassifications

Certain prior period amounts have been reclassified to conform to current period presentation.

Use of Estimates

The preparation of the consolidated financial statements requires management to make estimates and assumptions that affect the amounts reported in the consolidated financial statements and accompanying notes. The Company regularly makes estimates and assumptions, including, but not limited to, revenue recognition constraints that result in variable consideration, the discount rate used to adjust the promised amount of consideration for the effects of a significant financing component, the estimates that affect the collectability of accounts receivable, the valuation of inventories, the useful lives of solar energy systems, the useful lives of property and equipment, the valuation and useful lives of intangible assets, the effective interest rate used to amortize pass-through financing obligations, the discount rate uses for operating and financing leases, the valuation of stock-based compensation, the determination of valuation allowances associated with deferred tax assets, the fair value of debt instruments disclosed and the redemption value of redeemable noncontrolling interests. The Company bases its estimates on historical experience and on various other assumptions believed to be reasonable. Actual results may differ from such estimates.
Segment Information

The Company has one operating segment with one business activity, providing solar energy services and products to customers. The Company’s chief operating decision maker (“CODM”) is its Chief Executive Officer, who manages operations on a consolidated basis for purposes of allocating resources. When evaluating performance and allocating resources, the CODM reviews financial information presented on a consolidated basis.

Revenues from external customers (including, but not limited to homeowners) for each group of similar products and services is as follows (in thousands):

<table>
<thead>
<tr>
<th></th>
<th>Year Ended December 31,</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2018</td>
</tr>
<tr>
<td>Customer agreements</td>
<td>$272,672</td>
</tr>
<tr>
<td>Incentives</td>
<td>131,794</td>
</tr>
<tr>
<td>Customer agreements and incentives</td>
<td>404,466</td>
</tr>
<tr>
<td>Solar energy systems</td>
<td>186,512</td>
</tr>
<tr>
<td>Products</td>
<td>169,003</td>
</tr>
<tr>
<td>Solar energy systems and product sales</td>
<td>355,515</td>
</tr>
<tr>
<td>Total revenue</td>
<td>$759,981</td>
</tr>
</tbody>
</table>

Revenue from Customer Agreements includes payments by customers for the use of the system as well as utility and other rebates assigned by the customer to the Company in the Customer Agreement. Revenue from incentives includes revenue from the sale of investment tax credits (“ITCs”) and renewable energy credits (“SRECs”).

Cash and Restricted Cash

Cash consists of bank deposits held in checking and savings accounts. The Company considers all highly liquid investments purchased with an original maturity of three months or less to be cash equivalents. The Company has exposure to credit risk to the extent cash balances exceed amounts covered by federal deposit insurance. The Company believes that its credit risk is not significant.

Restricted cash represents amounts related to obligations under certain financing transactions and future replacement of solar energy system components.

The following table provides a reconciliation of cash, and restricted cash reported within the consolidated balance sheets that sum to the total of the same such amounts shown in the consolidated statement of cash flows. Cash and restricted cash consists of the following (in thousands):

<table>
<thead>
<tr>
<th></th>
<th>December 31,</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2018</td>
</tr>
<tr>
<td>Cash</td>
<td>$226,625</td>
</tr>
<tr>
<td>Restricted cash, current and long-term</td>
<td>77,774</td>
</tr>
<tr>
<td>Total</td>
<td>$304,399</td>
</tr>
</tbody>
</table>

Accounts Receivable

Accounts receivable consist of amounts due from customers as well as state and utility rebates due from government agencies and utility companies. Under Customer Agreements, the customers typically assign incentive rebates to the Company.

Accounts receivable are recorded at net realizable value. The Company maintains allowances for the applicable portion of receivables when collection becomes doubtful. The Company estimates anticipated losses from doubtful accounts based upon the expected collectability of all accounts receivables, which takes into account the number of days past due, collection history, identification of specific customer exposure, and current economic conditions.
trends. Once a receivable is deemed to be uncollectible, it is written off. In 2018, 2017 and 2016, the Company recorded provisions for bad debt expense of $3.4 million, $2.1 million and $1.4 million, respectively, and wrote-off uncollectible receivables of $2.8 million, $1.6 million and $1.8 million, respectively.

Accounts receivable, net consists of the following (in thousands):

<table>
<thead>
<tr>
<th></th>
<th>December 31,</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2018</td>
</tr>
<tr>
<td>Customer receivables</td>
<td>$ 64,180</td>
</tr>
<tr>
<td>Other receivables</td>
<td>1,466</td>
</tr>
<tr>
<td>Rebates receivable</td>
<td>3,017</td>
</tr>
<tr>
<td>Allowance for doubtful accounts</td>
<td>(2,228)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$ 66,435</strong></td>
</tr>
</tbody>
</table>

State Tax Credits Receivable

State tax credits receivable are recognized upon submission of the state income tax return.

Inventories

Inventories are stated at the lower of cost or net realizable value on a first-in, first-out basis. Inventories consist of raw materials such as photovoltaic panels, inverters and mounting hardware as well as miscellaneous electrical components that are sold as-is by the distribution operations and used in installations and work-in-process. Work-in-process primarily relates to solar energy systems that will be sold to customers, which are partially installed and have yet to pass inspection by the responsible city or utility department. For solar energy systems where the Company performs the installation, the Company commences transferring component parts from inventories to construction-in-progress, a component of solar energy systems, once a lease contract with a lease customer has been executed and the component parts have been assigned to a specific project. Additional costs incurred including labor and overhead are recorded within construction in progress.

The Company periodically reviews inventories for unusable and obsolete items based on assumptions about future demand and market conditions. Based on this evaluation, provisions are made to write inventories down to their market value.

Solar Energy Systems, net

The Company records solar energy systems subject to signed Customer Agreements and solar energy systems that are under installation as solar energy systems, net on its consolidated balance sheet. Solar energy systems, net is comprised of system equipment costs related to solar energy systems, less accumulated depreciation and amortization. Depreciation on solar energy systems is calculated on a straight-line basis over the estimated useful lives of the systems of 35 years. Prior to the fourth quarter of 2016, the Company calculated depreciation on solar energy systems on a straight-line basis to their estimated residual values over the estimated useful lives of systems, which was expected to be 20 years. The Company revised the estimated useful life of solar energy systems in the fourth quarter of 2016, as the Company reviewed its assumptions and concluded that customers are more likely to renew their lease rather than purchase the solar energy system at the end of the lease term. The impact of the change in estimate was immaterial for 2016 and future periods. The Company periodically reviews its estimated useful life and recognizes changes in estimates by prospectively adjusting depreciation expense. Inverters and batteries are depreciated over their estimated useful life of 10 years.

Solar energy systems under construction will be depreciated as solar energy systems subject to signed Customer Agreements when the respective systems are completed and interconnected.

Property and Equipment, net

Property and equipment, net consists of leasehold improvements, furniture, computer hardware and software, machinery and equipment and automobiles. All property and equipment are stated at historical cost net of accumulated depreciation. Repairs and maintenance are expensed as incurred.
Property and equipment is depreciated on a straight-line basis over the following periods:

<table>
<thead>
<tr>
<th>Asset Type</th>
<th>Useful Life</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leasehold improvements</td>
<td>Lesser of 6 years or lease term</td>
</tr>
<tr>
<td>Furniture</td>
<td>5 years</td>
</tr>
<tr>
<td>Computer hardware and software</td>
<td>3 years</td>
</tr>
<tr>
<td>Machinery and equipment</td>
<td>5 years or lease term</td>
</tr>
<tr>
<td>Automobiles</td>
<td>Lease term</td>
</tr>
</tbody>
</table>

**Capitalization of Software Costs**

For costs incurred in the development of internal use software, the Company capitalizes costs incurred during the application development stage. Costs related to preliminary project activities and post implementation activities are expensed as incurred. Internal use software is amortized on a straight-line basis over its estimated useful life. Additional costs of $2.5 million, $6.1 million and $4.9 million were capitalized in 2018, 2017 and 2016, respectively.

**Intangible Assets, net**

Finite-lived intangible assets are initially recorded at fair value and are subsequently presented net of accumulated amortization. Intangible assets are amortized on a straight-line basis over their estimated useful lives as follows:

<table>
<thead>
<tr>
<th>Asset Type</th>
<th>Useful Life</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer relationships</td>
<td>6-10 years</td>
</tr>
<tr>
<td>Developed technology</td>
<td>5 years</td>
</tr>
<tr>
<td>Trade names</td>
<td>5-8 years</td>
</tr>
</tbody>
</table>

**Impairment of Long-Lived Assets**

The carrying amounts of the Company’s long-lived assets, including solar energy systems and intangible assets subject to depreciation and amortization, are periodically reviewed for impairment whenever events or changes in circumstances indicate that the carrying value of these assets may not be recoverable or that the useful life is shorter than originally estimated. Factors that are considered in deciding when to perform an impairment review would include significant negative industry or economic trends and significant changes or planned changes in the use of the assets. Recoverability of these assets is measured by comparison of the carrying amount of each asset group to the future undiscounted cash flows the asset group is expected to generate over its remaining life. If the asset group is considered to be impaired, the amount of any impairment is measured as the difference between the carrying value and the fair value of the impaired asset group. If the useful life is shorter than originally estimated, the Company amortizes the remaining carrying value over the new shorter useful life. The Company has recognized no material impairments of its long-lived assets in any of the periods presented.

**Goodwill**

Goodwill represents the excess of the purchase price over the fair value of assets acquired and liabilities assumed. Goodwill is reviewed for impairment at least annually or whenever events or changes in circumstances indicate that the carrying amount may be impaired. The Company has determined that it operates as one reporting unit and the Company’s goodwill is recorded at the enterprise level. The Company performs its annual impairment test of goodwill on October 1 of each fiscal year or whenever events or circumstances change or occur that would indicate that goodwill might be impaired. When assessing goodwill for impairment, the Company uses qualitative and if necessary, quantitative methods in accordance with FASB ASC Topic 350, Goodwill. The Company also considers its enterprise value and if necessary, discounted cash flow model, which involves assumptions and estimates, including the Company’s future financial performance, weighted average cost of capital and interpretation of currently enacted tax laws.

Circumstances that could indicate impairment and require the Company to perform a quantitative impairment test include a significant decline in the Company’s financial results, a significant decline in the Company’s enterprise value relative to its net book value, an unanticipated change in competition or the Company’s market share and a
significant change in the Company's strategic plans. As of October 1, 2018, the Company concluded that the fair value of the Company exceeded its carrying value.

**Deferred Revenue**

When the Company receives consideration, or when such consideration is unconditionally due, from a customer prior to delivering goods or services to the customer under the terms of a Customer Agreement, the Company records deferred revenue. Such deferred revenue consists of amounts for which the criteria for revenue recognition have not yet been met and includes amounts that are collected or assigned from customers, including upfront deposits and prepayments, and rebates. Deferred revenue relating to financing component elements represents the cumulative excess of interest expense recorded on financing component elements over the related revenue recognized to date and will eventually net to zero by the end of the initial term. Amounts received related to the sales of SRECs which have not yet been delivered to the counterparty are recorded as deferred revenue.

The opening balance of deferred revenue was $525.4 million as of December 31, 2016. Deferred revenue consists of the following (in thousands):

<table>
<thead>
<tr>
<th></th>
<th>December 31, 2018</th>
<th>December 31, 2017</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Under Customer Agreements:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Payments received</td>
<td>$538,926</td>
<td>$517,544</td>
</tr>
<tr>
<td>Financing component balance</td>
<td>37,801</td>
<td>30,736</td>
</tr>
<tr>
<td></td>
<td>576,727</td>
<td>548,280</td>
</tr>
<tr>
<td><strong>Under SREC contracts:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Payments received</td>
<td>12,977</td>
<td>14,805</td>
</tr>
<tr>
<td>Financing component balance</td>
<td>1,921</td>
<td>1,767</td>
</tr>
<tr>
<td></td>
<td>14,898</td>
<td>16,572</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>$591,625</td>
<td>$564,852</td>
</tr>
</tbody>
</table>

In the years ended December 31, 2018, 2017 and 2016, the Company recognized revenue of $52.9 million, $47.7 million and $42.4 million, respectively, from amounts included in deferred revenue at the beginning of the respective periods. Revenue allocated to remaining performance obligations represents contracted revenue that has not yet been recognized and includes deferred revenue as well as amounts that will be invoiced and recognized as revenue in future periods. Contracted but not yet recognized revenue was approximately $5.3 billion as of December 31, 2018, of which the Company expects to recognize approximately 6% over the next 12 months. The annual recognition is not expected to vary significantly over the next 10 years as the vast majority of existing Customer Agreements have at least 10 years remaining, given that the average age of the Company’s fleet of residential solar energy systems under Customer Agreements is less than three years due to the Company being formed in 2007 and having experienced significant growth in the last few years. The annual recognition on these existing contracts will gradually decline over the midpoint of the Customer Agreements as the typically 20 or 25 year initial term expires.

**Deferred Grants**

Deferred grants consist of U.S. Treasury grants and state tax credits. The Company applied for a renewable energy technologies income tax credit offered by one of the states in the form of a cash payment and deferred the tax credit as a grant on the consolidated balance sheets. The Company records the grants as deferred grants and recognizes the benefit on a straight-line basis over the estimated depreciable life of the associated assets as a reduction in Cost of customer agreements and incentives. As described in the Solar Energy Systems, net section above, the estimated depreciable life of the associated assets was revised from 20 to 35 years in 2016.
Warranty Accrual

The Company accrues warranty costs when revenue is recognized for solar energy systems sales, based on the estimated future costs of meeting its warranty obligations. Warranty costs primarily consist of replacement costs for supplies and labor costs for service personnel since warranties for equipment and materials are covered by the original manufacturer’s warranty (other than a small deductible in certain cases). As such, the warranty reserve is immaterial in all periods presented. The Company makes and revises these estimates based on the number of solar energy systems under warranty, the Company’s historical experience with warranty claims, assumptions on warranty claims to occur over a systems’ warranty period and the Company’s estimated replacement costs.

Solar Energy Performance Guarantees

The Company guarantees to customers certain specified minimum solar energy production output for solar facilities over the initial term of the Customer Agreements. The Company monitors the solar energy systems to determine whether these specified minimum outputs are being achieved. Annually or every two years, depending on the terms of the Customer Agreement, the Company will refund a portion of electricity payments to a customer if his or her solar energy production output was less than the performance guarantee. The Company considers this a variable component that offsets the transaction price.

Derivative Financial Instruments

The Company recognizes all derivative instruments on the balance sheet at their fair value. Changes in the fair value of derivatives are recorded each period in current earnings or other comprehensive loss if a derivative is designated as part of a hedge transaction. The ineffective portion of the hedge, if any, is immediately recognized in earnings and are included in other expenses (income), net in the consolidated statements of operations.

The Company uses derivative financial instruments, primarily interest rate swaps, to manage its exposure to interest rate risks on its syndicated term loans, which are recognized on the balance sheet at their fair values. On the date that the Company enters into a derivative contract, the Company formally documents all relationships between the hedging instruments and the hedged items, as well as its risk management objective and strategy for undertaking each hedge transaction. Derivative instruments designated in a hedge relationship to mitigate exposure to variability in expected future cash flows, or other types of forecasted transactions, are considered cash flow hedges. Cash flow hedges are accounted for by recording the fair value of the derivative instrument on the balance sheet as either a freestanding asset or liability. Changes in the fair value of a derivative that is designated and qualifies as an effective cash flow hedge are recorded in accumulated other comprehensive loss, net of tax, until earnings are affected by the variability of cash flows of the hedged item. Any derivative gains and losses that are not effective in hedging the variability of expected cash flows of the hedged item or that do not qualify for hedge accounting treatment are recognized directly into income. At the hedge’s inception and at least quarterly thereafter, a formal assessment is performed to determine whether changes in cash flows of the derivative instrument have been highly effective in offsetting changes in the cash flows of the hedged item and whether they are expected to be highly effective in the future. The Company discontinues hedge accounting prospectively when (i) it determines that the derivative is no longer effective in offsetting changes in the cash flows of a hedged item; (ii) the derivative expires or is sold, terminated, or exercised; or (iii) management determines that designating the derivative as a hedging instrument is no longer appropriate. In all situations in which hedge accounting is discontinued and the derivative remains outstanding, the derivative instrument is carried at its fair market value on the balance sheet with the changes in fair value recognized in current period earnings. The remaining balance in accumulated other comprehensive loss associated with the derivative that has been discontinued is not recognized in the income statement unless it is probable that the forecasted transaction will not occur. Such amounts are recognized in earnings when earnings are affected by the hedged transaction.

Fair Value of Financial Instruments

The Company defines fair value as the exchange price that would be received for an asset or an exit price that would be paid to transfer a liability in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date. The Company uses valuation approaches to measure fair value that maximize the use of observable inputs and minimize the use of unobservable inputs. The FASB establishes a three-tier fair value hierarchy for disclosure of fair value measurements as follows:
Level 1—Inputs are unadjusted, quoted prices in active markets for identical assets or liabilities at the measurement date;

Level 2—Inputs are observable, unadjusted quoted prices in active markets for similar assets or liabilities, unadjusted quoted prices for identical or similar assets or liabilities in markets that are not active, or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the related assets or liabilities; and

Level 3—Inputs that are unobservable, significant to the measurement of the fair value of the assets or liabilities and are supported by little or no market data.

The Company's financial instruments include cash, receivables, accounts payable, accrued expenses, distributions payable to noncontrolling interests, derivatives, and recourse and non-recourse debt.

Revenue Recognition

The Company recognizes revenue when control of goods or services is transferred to its customers, in an amount that reflects the consideration it expected to be entitled to in exchange for those goods or services.

Customer agreements and incentives

Customer agreements and incentives revenue is primarily comprised of revenue from Customer Agreements in which the Company provides continuous access to a functioning solar system and revenue from the sales of SRECs generated by the Company’s solar energy systems to third parties.

The Company begins to recognize revenue on Customer Agreements when permission to operate ("PTO") is given by the local utility company or on the date daily operation commences if utility approval is not required. Revenue recognition does not necessarily follow the receipt of cash. The Company recognizes revenue evenly over the time that it satisfies its performance obligations over the initial term of the Customer Agreements. Customer Agreements typically have an initial term of 20 or 25 years. After the initial contract term, our Customer Agreements typically automatically renew on an annual basis and the rate is initially set at up to a 10% discount to then prevailing power prices.

SREC revenue arises from the sale of environmental credits generated by solar energy systems and is generally recognized upon delivery of the SRECs to the counterparty. For pass-through financing obligation Funds, the value attributable to the monetization of ITCs are recognized in the period a solar system is granted PTO - see Note 14, Pass-through Financing Obligations.

In determining the transaction price, the Company adjusts the promised amount of consideration for the effects of the time value of money when the timing of payments provides it with a significant benefit of financing the transfer of goods or services to the customer. In those circumstances, the contract contains a significant financing component. When adjusting the promised amount of consideration for a significant financing component, the Company uses the discount rate that would be reflected in a separate financing transaction between the entity and its customer at contract inception and recognizes the revenue amount on a straight-line basis over the term of the Customer Agreement, and interest expense using the effective interest rate method.

Consideration from customers is considered variable due to the performance guarantee under Customer Agreements and liquidating damage provisions under SREC contracts in the event minimum deliveries are not achieved. Performance guarantees provide a credit to the customer if the system's cumulative production, as measured on various PTO anniversary dates, is below the Company's guarantee of a specified minimum. Revenue is recognized to the extent it is probable that a significant reversal of such revenue will not occur.

The Company capitalizes incremental costs incurred to obtain a contract in Other Assets in the consolidated balance sheets. These amounts are amortized on a straight-line basis over the term of the Customer Agreements, and are included in Sales and marketing in the consolidated statements of operations.
Solar energy systems and product sales

For solar energy systems sold to customers, the Company recognizes revenue when the solar energy system passes inspection by the authority having jurisdiction. The Company’s installation projects are typically completed in less than twelve months.

Product sales consist of solar panels, racking systems, inverters, other solar energy products sold to resellers and customer leads. Product sales revenue is recognized at the time when control is transferred, upon shipment. Customer lead revenue, included in product sales, is recognized at the time the lead is delivered.

Taxes assessed by government authorities that are directly imposed on revenue producing transactions are excluded from solar energy systems and product sales.

Cost of Revenue

Customer agreements and incentives

Cost of revenue for customer agreements and incentives is primarily comprised of (1) the depreciation of the cost of the solar energy systems, as reduced by amortization of deferred grants, (2) solar energy system operations, monitoring and maintenance costs including associated personnel costs, and (3) allocated corporate overhead costs. Upon adoption of Accounting Standards Update (“ASU”) No. 2014-09, Revenue from Contracts with Customers (“Topic 606”), the Company no longer records initial direct costs from the origination of Customer Agreements. Instead, the Company records costs to obtain a contract as described in Revenue Recognition - Customer agreements and incentives above.

Solar energy systems and product sales

Cost of revenue for solar energy systems and non-lead generation product sales consist of direct and indirect material and labor costs for solar energy systems installations and product sales. Also included are engineering and design costs, estimated warranty costs, freight costs, allocated corporate overhead costs, vehicle depreciation costs and personnel costs associated with supply chain, logistics, operations management, safety and quality control. Cost of revenue for lead generations consists of costs related to direct-response advertising activities associated with generating customer leads.

Research and development Expense

Research and development expenses include personnel costs, allocated overhead costs, and other costs related to the development of our proprietary technology.

Stock-Based Compensation

The Company grants stock options and restricted stock units (“RSUs”) for its equity incentive plan and employee stock purchase plan. Stock-based compensation to employees is measured based on the grant date fair value of the awards and recognized over the period during which the employee is required to perform services in exchange for the award (generally the vesting period of the award). The Company estimates the fair value of stock options and employee stock purchase plans awards granted using the Black-Scholes option-valuation model. Compensation cost is recognized over the vesting period of the applicable award using the straight-line method for those options expected to vest.

The Company also grants RSUs to non-employees that vest upon the satisfaction of both performance and service conditions. For RSUs granted to non-employees that vest upon the satisfaction of a performance condition, the Company starts recognizing expense on the RSUs when the performance condition is met.
Noncontrolling Interests and Redeemable Noncontrolling Interests

Noncontrolling interests represent investors’ interests in the net assets of the Funds that the Company has created to finance the cost of its solar energy systems subject to the Company’s Customer Agreements. The Company has determined that the contractual provisions in the funding arrangements represent substantive profit sharing arrangements. The Company has further determined that the appropriate methodology for attributing income and loss to the noncontrolling interests and redeemable noncontrolling interests each period is a balance sheet approach referred to as the hypothetical liquidation at book value (“HLBV”) method.

Under the HLBV method, the amounts of income and loss attributed to the noncontrolling interests and redeemable noncontrolling interests in the consolidated statements of operations reflect changes in the amounts the investors would hypothetically receive at each balance sheet date under the liquidation provisions of the contractual agreements of these arrangements, assuming the net assets of these funding structures were liquidated at recorded amounts. The Company’s initial calculation of the investor’s noncontrolling interest in the results of operations of these funding arrangements is determined as the difference in the noncontrolling interests’ claim under the HLBV method at the start and end of each reporting period, after taking into account any capital transactions, such as contributions or distributions, between the Fund and the investors.

The Company classifies certain noncontrolling interests with redemption features that are not solely within the control of the Company outside of permanent equity on its consolidated balance sheets. Redeemable noncontrolling interests are reported using the greater of their carrying value as determined by the HLBV method or their estimated redemption value at each reporting date.

Income Taxes

The Company recognizes deferred tax assets and liabilities for the expected future tax consequences of events that have been included in the consolidated financial statements and tax returns. Under this method, deferred tax assets and liabilities are determined based on the difference between the financial statement and tax basis of assets and liabilities using enacted tax rates in effect for the year in which the differences are expected to reverse. Valuation allowances are provided against deferred tax assets to the extent that it is more likely than not that the deferred tax asset will not be realized. The Company is subject to the provisions of ASC 740, Income Taxes, which establishes consistent thresholds as it relates to accounting for income taxes. It defines the threshold for recognizing the benefits of tax return positions in the financial statements as “more likely than not” to be sustained by the taxing authority and requires measurement of a tax position meeting the more-likely-than-not criterion, based on the largest benefit that is more than 50% likely to be realized. Management has analyzed the Company’s inventory of tax positions with respect to all applicable income tax issues for all open tax years (in each respective jurisdiction).

The Company sells solar energy systems to the Funds. As the Funds are consolidated by the Company, the gain on the sale of the solar energy systems is not recognized in the consolidated financial statements. However, this gain is recognized for tax reporting purposes. Since these transactions are intercompany sales, prior to January 1, 2017, any tax expense incurred related to these intercompany sales is deferred and recorded as a prepaid tax asset and amortized over the depreciable life of the underlying solar energy systems which has been estimated to be 35 years in accordance with ASC Topic 810. With the adoption of ASU 2016-16 on January 1, 2017 the Company reversed net prepaid tax assets of $378.5 million and recorded the gross deferred tax assets associated with the historical intercompany sales of solar energy systems, which in turn reduced the deferred tax liabilities on investment in partnerships by $378.2 million with the remaining $0.3 million being recorded as a cumulative effect of adoption in the Company’s Consolidated Statements of Redeemable Noncontrolling Interest and Stockholders’ Equity. The adoption did not have an impact on the Company’s Consolidated Statement of Operations.

The Company files tax returns as prescribed by the tax laws of the jurisdictions in which it operates. In the normal course of business, the Company is subject to examination by federal, state and local jurisdictions, where applicable. The statute of limitations for the tax returns varies by jurisdiction.
Concentrations of Risk

Financial instruments which potentially subject the Company to concentrations of credit risk consist primarily of cash and accounts receivable, which includes rebates receivable. The associated risk of concentration for cash is mitigated by banking with institutions with high credit ratings. At certain times, amounts on deposit exceed Federal Deposit Insurance Corporation insurance limits. The Company does not require collateral or other security to support accounts receivable. To reduce credit risk, management performs periodic credit evaluations and ongoing evaluations of its customers’ financial condition. Rebates receivable are due from various states and local governments as well as various utility companies. The Company considers the collectability risk of such amounts to be low. The Company is not dependent on any single customer. The Company’s customers under Customer Agreements are primarily located in California, Arizona, New Jersey, Hawaii, New York and Massachusetts. The loss of a customer would not adversely impact the Company’s operating results or financial position. The Company depends on a limited number of suppliers of solar panels and other system components. During the years ended December 31, 2018 and 2017, the solar materials purchases from the top five suppliers were approximately $221.5 million and $188.8 million, respectively.

Recently Issued and Adopted Accounting Standards

Accounting standards adopted January 1, 2018 causing recast of prior periods:

In May 2014, the FASB issued Topic 606. The standard establishes a single revenue recognition model for all contracts with customers, eliminates industry specific requirements, and expands disclosure requirements. The Company adopted Topic 606 effective January 1, 2018, using the full retrospective method, which required the Company to recast each prior reporting period presented. The Company has elected to use the practical expedient under Topic 606 and has excluded disclosures of transaction prices allocated to remaining performance obligations and when the Company expects to recognize such revenue for all periods prior to the date of initial application.

In February 2016, the FASB issued ASU No. 2016-02, Leases, to replace existing lease guidance with Accounting Standards Codification Topic 842 ("Topic 842"). Topic 842 changes how the definition of a lease is applied and judgment may be required in applying the definition of a lease to certain arrangements. The Company elected to early adopt the standard effective January 1, 2018 concurrent with the adoption of Topic 606 related to revenue recognition, using the modified retrospective approach at the beginning of the earliest comparative period presented in the financial statements, which required the Company to recast each prior reporting period presented. In July 2018, the FASB issued ASU No. 2018-10, Codification Improvements to Topic 842, Leases, to clarify how to apply certain aspects of the new leases standard. The clarifications address the rate implicit in the lease, impairment of the net investment in the lease, lessee reassessment of lease classification, lessor reassessment of lease term and purchase options, variable payments that depend on an index or rate and certain transition adjustments. These amendments have the same effective date and transition requirements as the new leases standard, as such the Company adopted the new ASU and the impact of adopting this standard was not material to its financial statements with respect to leases where the Company is the lessee.

Upon the adoption of Topic 842, the Company’s Customer Agreements are accounted for under Topic 606 due to changes in the definition of a lease under Topic 842 when the Company was considered a lessor. For operating leases in which the Company is the lessee, the Company concluded that all existing operating leases under Accounting Standards Codification Topic 840 ("Topic 840"), Leases, continue to be classified as operating leases under Topic 842, and all existing capital leases under Topic 840 are classified as finance leases under Topic 842. The Company has lease agreements with lease and non-lease components, which are generally accounted for as a single lease component. The Company accounts for short-term leases on a straight-line basis over the lease term.

Under Topic 606, total consideration for Customer Agreements, including price escalators and performance guarantees, is estimated and recognized over the term of the Customer Agreement. This accounting for price escalators creates an unbilled receivable balance for the first half of the Customer Agreement, which is then reduced over the second half. Customer Agreements and SRECs with a prepaid element are deemed to include a significant financing component, as defined under Topic 606, which increases both revenue and interest expense. For pass-through financing obligation funds that report investment tax credit revenue, the ITC revenue is now recognized in full at PTO. SREC revenue is estimated net of any variable consideration related to possible revenue...
liquidated damages, and recognized upon delivery of SRECs to the counterparty. The accounting did not materially differ for revenue currently recognized as solar energy systems and product sales. The adoption of Topic 606 also resulted in an adjustment to the Company’s deferred tax liabilities, and impacted the analysis of the realizability of deferred tax assets, resulting in the release of valuation allowance related to state deferred tax assets.

In November 2016, the FASB issued ASU 2016-18, Statement of Cash Flows (“Topic 230”), Restricted Cash, which requires a statement of cash flows to present the change during the period in the total of cash, cash equivalents and amounts generally described as restricted cash and restricted cash equivalents. The Company adopted Topic 230 effective January 1, 2018, using the retrospective transition method, which required the Company to recast each prior reporting period presented. As a result, the Company no longer presents transfers between cash and restricted cash in the consolidated cash flow statements.

In August 2017, the FASB issued ASU No. 2017-12, Derivatives and Hedging, Targeted Improvements to Accounting for Hedging Activities, which expands an entity’s ability to hedge nonfinancial and financial risk components, eliminates the requirement to separately measure and report hedge ineffectiveness, and aligned the recognition and presentation of the effects of hedging instruments in the financial statements. The Company adopted ASU 2017-12 effective October 1, 2018, with the retrospective adjustment applicable to prior periods included as a cumulative-effect adjustment to accumulated other comprehensive loss and retained earnings. The adoption of ASU 2017-12 did not have a material impact on the Company’s consolidated financial statements.

In October 2018, the FASB issued ASU No. 2018-16, Derivatives and Hedging (Topic 815), Inclusion of the Secured Overnight Financing Rate ("SOFR") Overnight Index Swap ("OIS") Rate as a Benchmark Interest Rate for Hedge Accounting Purposes, which adds the OIS rate based on the SOFR as a benchmark interest rate for hedge accounting purposes. The Company adopted ASU 2018-16 on a prospective basis for qualifying new or redesignated hedging relationships entered into on or after October 1, 2018. The adoption of ASU 2018-16 did not have a material impact on the Company’s consolidated financial statements.

Adjustments to Previously Reported Financial Statements from the Adoption of Accounting Standards

The primary impact of adopting Topic 606 and Topic 842 is on the recognition of revenue from Customer Agreements, and certain incentives revenue, namely SRECs and ITCs. Previously, under Topic 840, the Company recognized revenue related to certain Customer Agreements as contingent rent. Under Topic 606, because the Company has a continuous obligation to provide fully functional systems that provide electricity over the term of the Customer Agreement, it recognizes revenue evenly over the term of the Customer Agreements taking into account price escalators and performance guarantees when estimating variable consideration. Previously, the Company recognized revenue related to the sale of SRECs to the extent the cumulative value of delivered SRECs per contract exceeded any possible liquidated damages for non-delivery, if any. Under Topic 606, the Company estimates revenue net of any variable consideration related to possible liquidated damages, and recognizes revenue upon delivery of SRECs to the counterparty. Under Topic 840, the Company previously reported ITC revenue over five years: following the point at which the related solar system was granted PTO, with one-fifth of the monetized ITCs recognized on each anniversary of the solar energy systems' PTO date. Under Topic 606, the Company recognizes ITC revenue in full at PTO. Previously, under Topic 840, the Company capitalized direct and incremental costs as a component of Solar energy systems, net on the consolidated balance sheets. Under Topic 606, the Company capitalizes incremental costs incurred to obtain a contract in Other Assets in the consolidated balance sheets. These amounts are amortized on a straight-line basis over the term of the Customer Agreements, and are included in Sales and marketing in the consolidated statements of operations.

In addition to the impact of revenue recognition related to Customer Agreements, the impact of adopting Topic 842 includes a change in accounting for leases when the Company is the lessee, primarily the inclusion of right-of-use (“ROU”) assets included in other assets on the consolidated balance sheets, and operating lease liabilities included in accrued expenses and other liabilities and other liabilities on the consolidated balance sheets. The income tax impact as a result of the adoption of Topic 842 was immaterial.

The following table presents the effect of the adoption of Topic 606 and Topic 842 on the Company's condensed consolidated balance sheet as of December 31, 2017 (in thousands):
The following table presents the effect of the adoption of Topic 606 and Topic 842 on the Company's condensed consolidated statement of operations for the years ended December 31, 2017 and 2016 (in thousands except per share amounts):

<table>
<thead>
<tr>
<th>Account</th>
<th>December 31, 2017</th>
<th>December 31, 2016</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>As Reported</td>
<td>Adoption Impact</td>
</tr>
<tr>
<td>-----------------------------------</td>
<td>-------------------</td>
<td>-------------------</td>
</tr>
<tr>
<td>Accounts receivable, net of allowances for doubtful accounts</td>
<td>$76,198</td>
<td>$(15,839)</td>
</tr>
<tr>
<td>Solar energy systems, net</td>
<td>3,319,708</td>
<td>(158,138)</td>
</tr>
<tr>
<td>Other assets</td>
<td>37,225</td>
<td>209,239</td>
</tr>
<tr>
<td>Accrued expenses and other liabilities</td>
<td>85,639</td>
<td>11,591</td>
</tr>
<tr>
<td>Deferred revenue, current portion</td>
<td>77,310</td>
<td>(34,701)</td>
</tr>
<tr>
<td>Deferred grants, current portion</td>
<td>8,269</td>
<td>(76)</td>
</tr>
<tr>
<td>Pass-through financing obligation, current portion</td>
<td>6,087</td>
<td>(700)</td>
</tr>
<tr>
<td>Deferred revenue, net of current portion</td>
<td>584,427</td>
<td>(62,184)</td>
</tr>
<tr>
<td>Deferred grants, net of current portion</td>
<td>228,603</td>
<td>(1,084)</td>
</tr>
<tr>
<td>Pass-through financing obligation, net of current portion</td>
<td>138,124</td>
<td>(5,301)</td>
</tr>
<tr>
<td>Other liabilities</td>
<td>13,520</td>
<td>29,223</td>
</tr>
<tr>
<td>Deferred tax liabilities</td>
<td>58,131</td>
<td>23,988</td>
</tr>
<tr>
<td>Redeemable noncontrolling interests</td>
<td>123,737</td>
<td>64</td>
</tr>
<tr>
<td>Additional paid-in capital</td>
<td>684,141</td>
<td>(1,191)</td>
</tr>
<tr>
<td>Retained earnings</td>
<td>131,959</td>
<td>70,775</td>
</tr>
<tr>
<td>Noncontrolling interests</td>
<td>354,076</td>
<td>4,858</td>
</tr>
</tbody>
</table>

Revenue: Customer agreements and incentives

<table>
<thead>
<tr>
<th>Revenue: Customer agreements and incentives</th>
<th>2017</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>As Reported</td>
<td>$231,433</td>
<td>$193,954</td>
</tr>
<tr>
<td>Adoption Impact</td>
<td>$(2,843)</td>
<td>$(7,519)</td>
</tr>
<tr>
<td>As Recast</td>
<td>$234,276</td>
<td>$186,435</td>
</tr>
<tr>
<td>Income tax expense</td>
<td>168,417</td>
<td>159,858</td>
</tr>
<tr>
<td>Adoption Impact</td>
<td>$(5,614)</td>
<td>5,956</td>
</tr>
<tr>
<td>As Recast</td>
<td>154,244</td>
<td>168,737</td>
</tr>
</tbody>
</table>

Cost of customer agreements and incentives

<table>
<thead>
<tr>
<th>Cost of customer agreements and incentives</th>
<th>2017</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>As Reported</td>
<td>$193,954</td>
<td>$137,115</td>
</tr>
<tr>
<td>Adoption Impact</td>
<td>$(7,519)</td>
<td>9,311</td>
</tr>
<tr>
<td>As Recast</td>
<td>$186,435</td>
<td>146,426</td>
</tr>
<tr>
<td>Income tax expense</td>
<td>159,858</td>
<td>162,781</td>
</tr>
<tr>
<td>Adoption Impact</td>
<td>$(5,614)</td>
<td>5,956</td>
</tr>
<tr>
<td>As Recast</td>
<td>154,244</td>
<td>168,737</td>
</tr>
</tbody>
</table>

Sales and marketing

<table>
<thead>
<tr>
<th>Sales and marketing</th>
<th>2017</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>As Reported</td>
<td>$137,115</td>
<td>$107,420</td>
</tr>
<tr>
<td>Adoption Impact</td>
<td>9,311</td>
<td>(20)</td>
</tr>
<tr>
<td>As Recast</td>
<td>146,426</td>
<td>107,400</td>
</tr>
<tr>
<td>Income tax expense</td>
<td>162,781</td>
<td>92,377</td>
</tr>
<tr>
<td>Adoption Impact</td>
<td>5,956</td>
<td>39</td>
</tr>
<tr>
<td>As Recast</td>
<td>168,737</td>
<td>92,416</td>
</tr>
</tbody>
</table>

General and administrative

<table>
<thead>
<tr>
<th>General and administrative</th>
<th>2017</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>As Reported</td>
<td>$107,420</td>
<td>$70,518</td>
</tr>
<tr>
<td>Adoption Impact</td>
<td>(20)</td>
<td>21,737</td>
</tr>
<tr>
<td>As Recast</td>
<td>107,400</td>
<td>92,255</td>
</tr>
<tr>
<td>Income tax expense</td>
<td>92,377</td>
<td>53,244</td>
</tr>
<tr>
<td>Adoption Impact</td>
<td>39</td>
<td>20,096</td>
</tr>
<tr>
<td>As Recast</td>
<td>92,416</td>
<td>73,340</td>
</tr>
</tbody>
</table>

Interest expense, net

<table>
<thead>
<tr>
<th>Interest expense, net</th>
<th>2017</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>As Reported</td>
<td>$70,518</td>
<td>$32,138</td>
</tr>
<tr>
<td>Adoption Impact</td>
<td>21,737</td>
<td>(19,785)</td>
</tr>
<tr>
<td>As Recast</td>
<td>92,255</td>
<td>12,353</td>
</tr>
<tr>
<td>Income tax expense</td>
<td>92,377</td>
<td>35,993</td>
</tr>
<tr>
<td>Adoption Impact</td>
<td>39</td>
<td>20,270</td>
</tr>
<tr>
<td>As Recast</td>
<td>92,416</td>
<td>56,263</td>
</tr>
</tbody>
</table>

Income tax expense

<table>
<thead>
<tr>
<th>Income tax expense</th>
<th>2017</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>As Reported</td>
<td>$32,138</td>
<td>$70,518</td>
</tr>
<tr>
<td>Adoption Impact</td>
<td>(19,785)</td>
<td>21,737</td>
</tr>
<tr>
<td>As Recast</td>
<td>12,353</td>
<td>35,993</td>
</tr>
<tr>
<td>Adoption Impact</td>
<td>39</td>
<td>20,270</td>
</tr>
<tr>
<td>Income tax expense</td>
<td>92,377</td>
<td>56,263</td>
</tr>
</tbody>
</table>

Net loss

<table>
<thead>
<tr>
<th>Net loss</th>
<th>2017</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>As Reported</td>
<td>$(286,734)</td>
<td>$(411,259)</td>
</tr>
<tr>
<td>Adoption Impact</td>
<td>(881)</td>
<td>(1,845)</td>
</tr>
<tr>
<td>As Recast</td>
<td>$(287,615)</td>
<td>$(413,104)</td>
</tr>
<tr>
<td>Income tax expense</td>
<td>$(303,301)</td>
<td>$(394,988)</td>
</tr>
<tr>
<td>Adoption Impact</td>
<td>(17,538)</td>
<td>(980)</td>
</tr>
<tr>
<td>As Recast</td>
<td>$(320,839)</td>
<td>$(395,968)</td>
</tr>
</tbody>
</table>

Net loss attributable to noncontrolling interests and redeemable noncontrolling interests

<table>
<thead>
<tr>
<th>Net loss attributable to noncontrolling interests and redeemable noncontrolling interests</th>
<th>2017</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>As Reported</td>
<td>$(411,259)</td>
<td>$(411,259)</td>
</tr>
<tr>
<td>Adoption Impact</td>
<td>(1,845)</td>
<td>(1,845)</td>
</tr>
<tr>
<td>As Recast</td>
<td>$(413,104)</td>
<td>$(413,104)</td>
</tr>
<tr>
<td>Income tax expense</td>
<td>$(394,988)</td>
<td>$(394,988)</td>
</tr>
<tr>
<td>Adoption Impact</td>
<td>(980)</td>
<td>(980)</td>
</tr>
<tr>
<td>As Recast</td>
<td>$(395,968)</td>
<td>$(395,968)</td>
</tr>
</tbody>
</table>

Net income attributable to common stockholders

<table>
<thead>
<tr>
<th>Net income attributable to common stockholders</th>
<th>2017</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>As Reported</td>
<td>$124,525</td>
<td>$124,525</td>
</tr>
<tr>
<td>Adoption Impact</td>
<td>964</td>
<td>964</td>
</tr>
<tr>
<td>As Recast</td>
<td>125,489</td>
<td>125,489</td>
</tr>
<tr>
<td>Income tax expense</td>
<td>91,687</td>
<td>91,687</td>
</tr>
<tr>
<td>Adoption Impact</td>
<td>(16,558)</td>
<td>(16,558)</td>
</tr>
<tr>
<td>As Recast</td>
<td>75,129</td>
<td>75,129</td>
</tr>
</tbody>
</table>

Basic net income per share attributable to common stockholders

<table>
<thead>
<tr>
<th>Basic net income per share attributable to common stockholders</th>
<th>2017</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>As Reported</td>
<td>1.18</td>
<td>1.18</td>
</tr>
<tr>
<td>Adoption Impact</td>
<td>0.01</td>
<td>0.01</td>
</tr>
<tr>
<td>As Recast</td>
<td>1.19</td>
<td>1.19</td>
</tr>
<tr>
<td>Income tax expense</td>
<td>0.90</td>
<td>0.90</td>
</tr>
<tr>
<td>Adoption Impact</td>
<td>(0.17)</td>
<td>(0.17)</td>
</tr>
<tr>
<td>As Recast</td>
<td>0.73</td>
<td>0.73</td>
</tr>
</tbody>
</table>

Diluted net income per share attributable to common stockholders

<table>
<thead>
<tr>
<th>Diluted net income per share attributable to common stockholders</th>
<th>2017</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>As Reported</td>
<td>1.15</td>
<td>1.15</td>
</tr>
<tr>
<td>Adoption Impact</td>
<td>0.01</td>
<td>0.01</td>
</tr>
<tr>
<td>As Recast</td>
<td>1.16</td>
<td>1.16</td>
</tr>
<tr>
<td>Income tax expense</td>
<td>0.87</td>
<td>0.87</td>
</tr>
<tr>
<td>Adoption Impact</td>
<td>(0.15)</td>
<td>(0.15)</td>
</tr>
<tr>
<td>As Recast</td>
<td>0.72</td>
<td>0.72</td>
</tr>
</tbody>
</table>
The following table presents the effect of the adoption of Topic 230, Topic 606 and Topic 842 on the Company's condensed consolidated statement of cash flows for the years ended December 31, 2017 and 2016 (in thousands):

<table>
<thead>
<tr>
<th></th>
<th>December 31, 2017</th>
<th>Adoption Impact</th>
<th>As Recast</th>
<th>December 31, 2016</th>
<th>Adoption Impact</th>
<th>As Recast</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net loss</td>
<td>$ (286,734)</td>
<td>$ (881)</td>
<td>$ (287,615)</td>
<td>$ (303,301)</td>
<td>$ (17,538)</td>
<td>$ (320,839)</td>
</tr>
<tr>
<td>Net cash used in operating activities</td>
<td>(61,011)</td>
<td>35,092</td>
<td>(96,103)</td>
<td>(150,580)</td>
<td>49,561</td>
<td>(200,141)</td>
</tr>
<tr>
<td>Net cash used in investing activities</td>
<td>(812,327)</td>
<td>35,008</td>
<td>(777,319)</td>
<td>(745,112)</td>
<td>49,310</td>
<td>(695,802)</td>
</tr>
<tr>
<td>Net cash provided by financing activities</td>
<td>869,499</td>
<td>21,350</td>
<td>890,849</td>
<td>898,192</td>
<td>953</td>
<td>899,145</td>
</tr>
<tr>
<td>Net change in cash and restricted cash&lt;sup&gt;(1)&lt;/sup&gt;</td>
<td>(3,839)</td>
<td></td>
<td>21,266</td>
<td>17,427</td>
<td>2,500</td>
<td>702</td>
</tr>
<tr>
<td>Cash and restricted cash, beginning of period&lt;sup&gt;(1)&lt;/sup&gt;</td>
<td>206,364</td>
<td>17,999</td>
<td>224,363</td>
<td>203,864</td>
<td>17,297</td>
<td>221,161</td>
</tr>
<tr>
<td>Cash and restricted cash, end of period&lt;sup&gt;(1)&lt;/sup&gt;</td>
<td>202,525</td>
<td>39,265</td>
<td>241,790</td>
<td>206,364</td>
<td>17,999</td>
<td>224,363</td>
</tr>
</tbody>
</table>

<sup>(1)</sup> Pursuant to Topic 230, restricted cash is included in the recasted balances in the statement of cash flows, as described above. The amounts in the previously reported column include only cash.

**Accounting standards to be adopted:**

In June 2016, the FASB issued ASU No. 2016-13, *Measurement of Credit Losses on Financial Instruments*, which replaces the current incurred loss impairment methodology with a current expected credit losses model. The amendment applies to entities which hold financial assets and net investment in leases that are not accounted for at fair value through net income as well as loans, debt securities, trade receivables, net investments in leases, off-balance sheet credit exposures, reinsurance receivables and any other financial assets not excluded from the scope that have the contractual right to receive cash. This ASU is effective for fiscal years beginning after December 15, 2019 and interim periods within those fiscal years. Early adoption is permitted. Adoption of this ASU is applied using a modified retrospective approach, with certain aspects requiring a prospective approach. The Company is currently evaluating this guidance and the impact it may have on the Company’s consolidated financial statements. In November 2018, the FASB issued ASU No. 2018-19, *Codification Improvements to Topic 326, Financial Instruments- Credit Losses*, which clarifies that operating lease receivables are not within the scope of Topic 326, but rather operating lease receivables will be tested for impairment under Topic 842.

In June 2018, the FASB issued ASU No. 2018-07, *Compensation - Stock Compensation (Topic 718), Improvements to Nonemployee Share-Based Payment Accounting*, which is intended to align the accounting for share-based payment awards issued to employees and nonemployees, however, this amendment does not apply to instruments issued in a financing transaction nor to equity instruments granted to a customer under a contract in the scope of Topic 606. Currently, performance conditions are recognized once the performance conditions are met. Under this new amendment, equity-classified nonemployee share-based payments will be measured at the grant-date fair value and will be recognized based on the probable outcome of the performance conditions. This ASU is effective for fiscal periods beginning after December 15, 2018. The Company is currently evaluating this guidance and the impact it may have on the Company's consolidated financial statements.

In July 2018, the FASB issued ASU No. 2018-09, *Codification Improvements*. This amendment makes changes to a variety of topics to clarify, correct errors in, or make minor improvements to the Accounting Standards Codification. The majority of the amendments in ASU 2018-09 are effective for periods beginning after December 15, 2018. The Company is currently evaluating this guidance and the impact it may have on the Company's consolidated financial statements.
In August 2018, the FASB issued ASU No. 2018-13, *Fair Value Measurement (Topic 820): Disclosure Framework-Changes to the Disclosure Requirements for Fair Value Measurement*, which modifies the disclosure requirements on fair value measurements as part of its disclosure framework project. Under this amendment, entities will no longer be required to disclose the amount of and reasons for transfers between Level 1 and Level 2 of the fair value hierarchy. However, for Level 3 fair value measurements, disclosures around the range and weighted average used to develop significant unobservable inputs will be required. This ASU is effective for fiscal periods beginning after December 15, 2019. The Company is currently evaluating this guidance and the impact it may have on the Company's consolidated financial statements and disclosures.

In August 2018, the FASB issued ASU No. 2018-15, *Intangibles-Goodwill and Other-Internal-Use Software (Subtopic 350-40): Customer’s Accounting for Implementation Costs Incurred in a Cloud Computing Arrangement That Is a Service Contract*, which requires a customer in a cloud computing arrangement that is a service contract to follow the internal-use software guidance in Topic 350, *Intangibles- Goodwill and Other*, to determine which implementation costs to capitalize as assets or expense as incurred. This ASU is effective for annual reporting periods, and interim periods within those years, beginning after December 15, 2019, and can be applied either prospectively to implementation costs incurred after the date of adoption or retrospectively to all arrangements. The Company is currently evaluating this guidance and the impact it may have on the Company's consolidated financial statements.

In August 2018, the Securities and Exchange Commission adopted a Disclosure Update and Simplification release, which outlines Regulation S-X amendments to eliminate outdated or duplicative disclosure requirements. The final rule also amends the interim financial statement requirements to require a reconciliation of changes in stockholders’ equity in the notes or as a separate statement. These amendments are effective for all filings made 30 days after the amendments are published in the Federal Register, which was on October 4, 2018. The SEC announced that it would not object if the first presentation of the changes in stockholders’ equity for a calendar year end filer were made in the Company’s March 31, 2019 Form 10-Q. The Company plans to use the new presentation beginning in 2019.

In October 2018, the FASB issued ASU No. 2018-17, *Consolidation (Topic 810)*, Targeted Improvements to Related Party Guidance for Variable Interest Entities, which aligns the evaluation of decision-making fees under the variable interest entity guidance. Under this new guidance, in order to determine whether decision-making fees represent a variable interest, an entity considers indirect interests held through related parties under common control on a proportionate basis. This ASU is effective for annual reporting periods, and interim periods within those years, beginning after December 15, 2019, and must be applied retrospectively with a cumulative-effect adjustment to retained earnings at the beginning of the earliest period presented. The Company is currently evaluating this guidance and the impact it may have on the Company's consolidated financial statements.

**Note 3. Acquisition**

**Clean Energy Experts, LLC**

In April 2015, the Company acquired Clean Energy Experts, LLC, a consumer demand and solar lead generation company, for $25.0 million in cash and 1.9 million shares of common stock valued at $19.1 million, net of settlement of a preexisting payable to CEE. Of this amount, $15.0 million in cash was paid and 1.4 million shares were issued in April 2015. The remaining $10.0 million in cash and 500,000 shares were paid and issued as follows: $5.0 million was paid and 250,000 shares were issued in October 2015 and $5.0 million was paid and 250,000 shares were issued in April 2016. An additional $8.8 million in cash and 599,999 shares of common stock were issued on April 1, 2017 due to the achievement of certain sales targets as well as continued employment of certain key employees acquired in the transaction, which was recorded as compensation expense. The acquisition is expected to enhance the Company’s efficient and consistent access to high-quality leads in existing and new markets.

**Note 4. Fair Value Measurement**
At December 31, 2018 and 2017, the carrying value of receivables, accounts payable, accrued expenses and distributions payable to noncontrolling interests approximates fair value due to their short-term nature and falls under the Level 2 hierarchy. The carrying values and fair values of debt instruments are as follows (in thousands):

<table>
<thead>
<tr>
<th></th>
<th>Carrying Value</th>
<th>Fair Value</th>
<th>Carrying Value</th>
<th>Fair Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bank line of credit</td>
<td>$247,000</td>
<td>$247,000</td>
<td>$247,000</td>
<td>$247,000</td>
</tr>
<tr>
<td>Senior debt</td>
<td>828,517</td>
<td>828,309</td>
<td>808,455</td>
<td>807,698</td>
</tr>
<tr>
<td>Subordinated debt</td>
<td>273,337</td>
<td>272,937</td>
<td>111,488</td>
<td>111,095</td>
</tr>
<tr>
<td>Securitization debt</td>
<td>400,068</td>
<td>394,756</td>
<td>95,821</td>
<td>96,999</td>
</tr>
<tr>
<td>SREC Loans</td>
<td></td>
<td>32,181</td>
<td></td>
<td>32,183</td>
</tr>
<tr>
<td>Total</td>
<td>$1,748,922</td>
<td>$1,743,002</td>
<td>$1,294,945</td>
<td>$1,294,975</td>
</tr>
</tbody>
</table>

At December 31, 2018 and 2017, the fair value of the Company’s lines of credit, and certain senior, subordinated, and SREC loans approximate their carrying values because their interest rates are variable rates that approximate rates currently available to the Company. At December 31, 2018 and 2017, the fair value of the Company’s other debt instruments are based on rates currently offered for debt with similar maturities and terms. The Company’s fair value of the debt instruments fell under the Level 2 hierarchy. These valuation approaches involve some level of management estimation and judgment, the degree of which is dependent on the price transparency for the instruments or market.

The Company determines the fair value of its interest rate swaps using a discounted cash flow model that incorporates an assessment of the risk of non-performance by the interest rate swap counterparty and an evaluation of the Company’s credit risk in valuing derivative instruments. The valuation model uses various inputs including contractual terms, interest rate curves, credit spreads and measures of volatility.

At December 31, 2018 and 2017, financial instruments measured at fair value on a recurring basis, based upon the fair value hierarchy are as follows (in thousands):

<table>
<thead>
<tr>
<th></th>
<th>Level 1</th>
<th>Level 2</th>
<th>Level 3</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Derivative assets:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interest rate swaps</td>
<td>—</td>
<td>6,958</td>
<td>—</td>
<td>$6,958</td>
</tr>
<tr>
<td>Total</td>
<td>$</td>
<td>—</td>
<td>$6,958</td>
<td>$6,958</td>
</tr>
<tr>
<td>Derivative liabilities:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interest rate swaps</td>
<td>—</td>
<td>11,910</td>
<td>—</td>
<td>$11,910</td>
</tr>
<tr>
<td>Total</td>
<td>$</td>
<td>—</td>
<td>$11,910</td>
<td>$11,910</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Level 1</th>
<th>Level 2</th>
<th>Level 3</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Derivative assets:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interest rate swaps</td>
<td>—</td>
<td>1,917</td>
<td>—</td>
<td>$1,917</td>
</tr>
<tr>
<td>Total</td>
<td>$</td>
<td>—</td>
<td>$1,917</td>
<td>$1,917</td>
</tr>
<tr>
<td>Derivative liabilities:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interest rate swaps</td>
<td>—</td>
<td>8,568</td>
<td>—</td>
<td>$8,568</td>
</tr>
<tr>
<td>Total</td>
<td>$</td>
<td>—</td>
<td>$8,568</td>
<td>$8,568</td>
</tr>
</tbody>
</table>

Note 5. Inventories

Inventories consist of the following (in thousands):

Solar energy systems, net consists of the following (in thousands):

<table>
<thead>
<tr>
<th>December 31,</th>
<th>2018</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solar energy system equipment costs</td>
<td>$3,823,853</td>
<td>$3,124,407</td>
</tr>
<tr>
<td>Inverters</td>
<td>396,054</td>
<td>317,390</td>
</tr>
<tr>
<td>Total solar energy systems</td>
<td>4,219,907</td>
<td>3,441,797</td>
</tr>
<tr>
<td>Less: accumulated depreciation and amortization</td>
<td>(535,891)</td>
<td>(399,280)</td>
</tr>
<tr>
<td>Add: construction-in-progress</td>
<td>136,001</td>
<td>119,053</td>
</tr>
<tr>
<td>Total solar energy systems, net</td>
<td>$3,820,017</td>
<td>$3,161,570</td>
</tr>
</tbody>
</table>

All solar energy systems, including construction-in-progress, have been leased to or are subject to signed Customer Agreements with customers. The Company recorded depreciation expense related to solar energy systems of $139.2 million, $112.8 million and $87.7 million for the years ended December 31, 2018, 2017 and 2016, respectively. The depreciation expense was reduced by the amortization of deferred grants of $7.8 million, $7.6 million and $13.0 million for the years ended December 31, 2018, 2017 and 2016, respectively.

Note 7. Property and Equipment, net

Property and equipment, net consists of the following (in thousands):

<table>
<thead>
<tr>
<th>December 31,</th>
<th>2018</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Machinery and equipment</td>
<td>$6,888</td>
<td>$4,126</td>
</tr>
<tr>
<td>Leasehold improvements, furniture, and computer hardware</td>
<td>14,755</td>
<td>13,709</td>
</tr>
<tr>
<td>Vehicles</td>
<td>55,093</td>
<td>43,413</td>
</tr>
<tr>
<td>Computer software</td>
<td>32,768</td>
<td>30,483</td>
</tr>
<tr>
<td>Total property and equipment</td>
<td>109,504</td>
<td>91,731</td>
</tr>
<tr>
<td>Less: Accumulated depreciation and amortization</td>
<td>(74,611)</td>
<td>(55,329)</td>
</tr>
<tr>
<td>Total property and equipment, net</td>
<td>$34,893</td>
<td>$36,402</td>
</tr>
</tbody>
</table>

Depreciation and amortization expense was $20.4 million, $19.5 million and $18.8 million for the years ended December 31, 2018, 2017 and 2016, respectively.

Note 8. Goodwill and Intangible Assets, net

The goodwill and intangible assets were acquired as part of the acquisition of Mainstream Energy Corporation, which included AEE Solar and its racking business SnapNrack, and Clean Energy Experts, LLC.

The Company performs its annual impairment test of goodwill on October 1 of each fiscal year or whenever events or circumstances change or occur that would indicate that goodwill might be impaired. The Company has determined that it has one reporting unit.

There was no impairment of goodwill during the years ended December 31, 2018, 2017 and 2016, respectively.
Intangible assets, net as of December 31, 2018 consist of the following (in thousands, except weighted average remaining life):

<table>
<thead>
<tr>
<th></th>
<th>Cost</th>
<th>Accumulated amortization</th>
<th>Carrying value</th>
<th>Weighted average remaining life (in years)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer relationships</td>
<td>$14,660</td>
<td>$(7,716)</td>
<td>$6,944</td>
<td>4.6</td>
</tr>
<tr>
<td>Developed technology</td>
<td>6,820</td>
<td>(5,328)</td>
<td>1,492</td>
<td>1.2</td>
</tr>
<tr>
<td>Trade names</td>
<td>6,990</td>
<td>(5,338)</td>
<td>1,652</td>
<td>4.1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$28,470</strong></td>
<td><strong>(18,382)</strong></td>
<td><strong>$10,088</strong></td>
<td></td>
</tr>
</tbody>
</table>

Intangible assets, net as of December 31, 2017 consist of the following (in thousands, except weighted average remaining life):

<table>
<thead>
<tr>
<th></th>
<th>Cost</th>
<th>Accumulated amortization</th>
<th>Carrying value</th>
<th>Weighted average remaining life (in years)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer relationships</td>
<td>$14,660</td>
<td>$(6,017)</td>
<td>$8,643</td>
<td>5.5</td>
</tr>
<tr>
<td>Developed technology</td>
<td>6,820</td>
<td>(3,963)</td>
<td>2,857</td>
<td>2.2</td>
</tr>
<tr>
<td>Trade names</td>
<td>6,990</td>
<td>(4,196)</td>
<td>2,794</td>
<td>4.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$28,470</strong></td>
<td><strong>(14,176)</strong></td>
<td><strong>$14,294</strong></td>
<td></td>
</tr>
</tbody>
</table>

The Company recorded amortization of intangible assets expense of $4.2 million, $4.2 million and $4.2 million for the years ended December 31, 2018, 2017 and 2016, respectively. As of December 31, 2018, expected amortization of intangible assets for each of the five succeeding fiscal years and thereafter is as follows (in thousands):

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>2019</td>
<td>$3,335</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2020</td>
<td>2,143</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2021</td>
<td>1,750</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2022</td>
<td>1,743</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2023</td>
<td>1,049</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thereafter</td>
<td>68</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$10,088</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Note 9. Other Assets**

Other assets consist of the following (in thousands):

<table>
<thead>
<tr>
<th></th>
<th>December 31,</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2018</td>
</tr>
<tr>
<td>Costs to obtain contracts</td>
<td>$219,307</td>
</tr>
<tr>
<td>Accumulated amortization of costs to obtain contracts</td>
<td>(24,992)</td>
</tr>
<tr>
<td>Unbilled receivables</td>
<td>81,703</td>
</tr>
<tr>
<td>Operating lease right-of-use assets</td>
<td>20,257</td>
</tr>
<tr>
<td>Other assets</td>
<td>39,410</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$335,685</strong></td>
</tr>
</tbody>
</table>

The Company recorded amortization of costs to obtain contracts of $8.6 million and $6.5 million for the years ended December 31, 2018 and 2017, respectively, in the sales and marketing expense.
The majority of unbilled receivables arise from fixed price escalators included in our long-term Customer Agreements. The escalator is included in calculating the total estimated transaction value for an individual Customer Agreement. The total estimated transaction value is then recognized over the term of the Customer Agreement. The amount of unbilled receivables increases while cumulative billings for an individual Customer Agreement are less than the cumulative revenue recognized for that Customer Agreement. Conversely, the amount of unbilled receivables decreases when the actual cumulative billings becomes higher than the cumulative revenue recognized. At the end of the initial term of a Customer Agreement, the cumulative amounts recognized as revenue and billed to date are the same, therefore the unbilled receivable balance for an individual Customer Agreement will be zero.

Note 10. Accrued Expenses and Other Liabilities

Accrued expenses and other liabilities consist of the following (in thousands):

<table>
<thead>
<tr>
<th></th>
<th>December 31,</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2018</td>
<td>2017</td>
<td></td>
</tr>
<tr>
<td>Accrued employee compensation</td>
<td>$39,738</td>
<td>$30,298</td>
<td></td>
</tr>
<tr>
<td>Operating lease obligations</td>
<td>7,857</td>
<td>9,202</td>
<td></td>
</tr>
<tr>
<td>Accrued interest</td>
<td>8,436</td>
<td>6,054</td>
<td></td>
</tr>
<tr>
<td>Accrued professional fees</td>
<td>9,199</td>
<td>5,837</td>
<td></td>
</tr>
<tr>
<td>Other accrued expenses</td>
<td>33,406</td>
<td>45,839</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$98,636</strong></td>
<td><strong>$97,230</strong></td>
<td></td>
</tr>
</tbody>
</table>

Note 11. Cash Equity Financing

In December 2016, the Company pooled and transferred its interests in certain financing funds into a special purpose entity (“SPE”) with a new investor. The Company has determined that the SPE is a variable interest entity and that the Company is the primary beneficiary of the SPE by reference to the power and benefits criterion under ASC 810, Consolidation. Accordingly, the Company consolidates the SPE in its consolidated financial statements and accounts for the investor’s equity interest in the SPE as a noncontrolling interest (see Note 15, VIE Arrangements). The Company did not recognize a gain or loss on the transfer of its interests in the financing funds and continues to consolidate the financing funds. The SPE’s assets and cash flows are not available to the other creditors of the Company, and the investor has no recourse to the Company’s other assets.

Note 12. Indebtedness

As of December 31, 2018, debt consisted of the following (in thousands, except percentages):

<table>
<thead>
<tr>
<th></th>
<th>Carrying Values, net of debt discount</th>
<th>Unused Borrowing Capacity</th>
<th>Interest Rate (1)</th>
<th>Maturity Date</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Current</td>
<td>Long Term</td>
<td>Total</td>
<td></td>
</tr>
<tr>
<td><strong>Recourse debt:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bank line of credit</td>
<td>$—</td>
<td>$247,000</td>
<td>$247,000</td>
<td>$406</td>
</tr>
<tr>
<td>Total recourse debt</td>
<td>$—</td>
<td>$247,000</td>
<td>$247,000</td>
<td>$406</td>
</tr>
<tr>
<td><strong>Non-recourse debt:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Senior</td>
<td>19,070</td>
<td>809,447</td>
<td>828,517</td>
<td>4.50% - 5.54%</td>
</tr>
<tr>
<td>Subordinated</td>
<td>5,824</td>
<td>267,513</td>
<td>273,337</td>
<td>7.03% - 10.00%</td>
</tr>
<tr>
<td>Securitization Class A</td>
<td>10,125</td>
<td>380,299</td>
<td>390,424</td>
<td>4.40% - 5.31%</td>
</tr>
<tr>
<td>Securitization Class B</td>
<td>465</td>
<td>9,179</td>
<td>9,644</td>
<td>5.38%</td>
</tr>
<tr>
<td><strong>Total non-recourse debt</strong></td>
<td>35,484</td>
<td>1,466,438</td>
<td>1,501,922</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>35,484</td>
<td>1,713,438</td>
<td>1,748,922</td>
<td>406</td>
</tr>
</tbody>
</table>

(1) Reflects contractual, unhedged rates. See Note 13, Derivatives for hedge rates.
As of December 31, 2017, debt consisted of the following (in thousands, except percentages):

<table>
<thead>
<tr>
<th>Carrying Values, net of debt discount</th>
<th>Unused Borrowing Capacity</th>
<th>Interest Rate (1)</th>
<th>Maturity Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current</td>
<td>Long Term</td>
<td>Total</td>
<td></td>
</tr>
<tr>
<td>Recourse debt:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bank line of credit</td>
<td>$—$247,000</td>
<td>$247,000</td>
<td>$406</td>
</tr>
<tr>
<td>Total recourse debt</td>
<td>—</td>
<td>$247,000</td>
<td>$406</td>
</tr>
<tr>
<td>Non-recourse debt:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Senior</td>
<td>3,561</td>
<td>804,894</td>
<td>808,455</td>
</tr>
<tr>
<td>Subordinated</td>
<td>4,301</td>
<td>107,187</td>
<td>111,488</td>
</tr>
<tr>
<td>Securitization Class A</td>
<td>5,534</td>
<td>82,203</td>
<td>85,737</td>
</tr>
<tr>
<td>Securitization Class B</td>
<td>440</td>
<td>9,644</td>
<td>10,084</td>
</tr>
<tr>
<td>SREC Loans</td>
<td>9,693</td>
<td>22,488</td>
<td>32,181</td>
</tr>
<tr>
<td>Total non-recourse debt</td>
<td>21,529</td>
<td>1,026,416</td>
<td>1,047,945</td>
</tr>
<tr>
<td>Total debt</td>
<td>$21,529</td>
<td>$1,273,416</td>
<td>$1,294,945</td>
</tr>
</tbody>
</table>

(1) Reflects contractual, unhedged rates. See Note 13, Derivatives for hedge rates.

Bank Line of Credit

The Company has outstanding borrowings under a syndicated working capital facility with banks for a total commitment of up to $250.0 million. The working capital facility is secured by substantially all of the unencumbered assets of the Company, as well as ownership interests in certain subsidiaries of the Company. Loans under the facility bear interest at LIBOR +3.25% per annum or the Base Rate + 2.25% per annum. The Base Rate is the highest of the Federal Funds Rate +0.50%, the Prime Rate, or LIBOR + 1.00%.

Under the terms of the working capital facility, the Company is required to meet various restrictive covenants, such as the completion and presentation of audited consolidated financial statements, maintaining a minimum unencumbered liquidity of at least $25.0 million at the end of each calendar month, maintaining quarter end liability to be at least $30.0 million, and maintaining a minimum interest coverage ratio of 3.00 or greater, measured quarterly as of the last day of each quarter. The Company was in compliance with all debt covenants as of December 31, 2018. As of December 31, 2018, the balance under this facility was $247.0 million with a maturity date in April 2020.

Syndicated Credit Facilities

Each of the Company's syndicated credit facilities contain customary covenants including the requirement to maintain certain financial measurements and provide lender reporting. Each of the syndicated credit facilities also contain certain provisions in the event of default which entitle lenders to take certain actions including acceleration of amounts due under the facilities and acquisition of membership interests and assets that are pledged to the lenders under the terms of the credit facilities. The facilities are non-recourse to the Company and are secured by net cash flows from Customer Agreements less certain operating, maintenance and other expenses which are available to the borrower after distributions to tax equity investors. The Company was in compliance with all debt covenants as of December 31, 2018.

As of December 31, 2018, certain subsidiaries of the Company have an outstanding balance of $282.7 million on secured credit facilities that were syndicated with various lenders due in October 2024. The credit facilities totaled $303.0 million and consisted of $293.0 million in term loans, and a $10.0 million revolving debt service reserve letter of credit facility. Term Loan A ("TLA") is a senior delayed draw term loan that bears interest at LIBOR +2.75% per annum for LIBOR loans or the Base Rate +1.75% per annum on Base Rate loans. Term Loan B ("TLB") is subordinated debt and consists of a Class A portion which accrues interest at a fixed interest rate of 7.03% per annum and a Class B portion which accrues interest at LIBOR + 5.00% per annum or the Base Rate + 4.00% per annum. The Base Rate is the highest of the Federal Funds Rate +0.50%, the Prime Rate, or LIBOR.
+1.00%. Under TLA, prepayments are permitted with no penalties. Under TLB, prepayments are permitted with associated penalties ranging from 0% - 5% depending on the timing of prepayments.

As of December 31, 2018, certain subsidiaries of the Company have an outstanding balance of $184.4 million on senior secured credit facilities that were syndicated with various lenders due in April 2024. These facilities are subject to the National Grid cash equity transaction. The credit facilities totaled $202.0 million and consisted of a $195.0 million senior delayed draw term loan facility and a $7.0 million revolving debt service reserve letter of credit facility. Loans under the facility bear interest at LIBOR +2.25% per annum for the initial four-year period for LIBOR loans or the Base Rate + 1.25% per annum for Base Rate Loans. The Base Rate is the highest of the Federal Funds Rate +0.50%, the Prime Rate, or LIBOR + 1.00%. The facilities are non-recourse to the Company and are secured by net cash flows from Customer Agreements and SRECs, less certain operating, maintenance and other expenses which are available to the borrower after distributions to tax equity investors. Prepayments are permitted under the delayed draw term loan facility.

As of December 31, 2018, certain subsidiaries of the Company have an outstanding balance of $316.2 million on secured credit facilities agreements, as amended, with a syndicate of banks due in March 2023. The facilities totaled $595.0 million and consisted of a revolving aggregation facility ("Aggregation Facility"), a term loan ("Term Loan") and a revolving debt service reserve letter of credit facility. Senior loans under the Aggregation Facility bear interest at LIBOR +2.50% per annum for the initial three-year revolving availability period, stepping up to LIBOR +2.75% per annum in the following two-year period. The subordinated Term Loan bears interest at LIBOR +5.00% per annum for the first three-year period, stepping up to LIBOR +6.50% per annum thereafter. Term Loan prepayment penalties range from 0% - 1% depending on the timing of prepayments.

Senior Debt

Each of the Company’s senior debt facilities contains customary covenants including the requirement to maintain certain financial measurements and provide lender reporting. Each of the senior debt facilities also contain certain provisions in the event of default which entitle lenders to take certain actions including acceleration of amounts due under the facilities and acquisition of membership interests and assets that are pledged to the lenders under the terms of the senior debt facilities. The facilities are non-recourse to the Company and are secured by net cash flows from Customer Agreements and SRECs, less certain operating, maintenance and other expenses which are available to the borrower after distributions to tax equity investors, where applicable. The Company was in compliance with all debt covenants as of December 31, 2018.

As of December 31, 2018, a subsidiary of the Company has an outstanding balance of $162.4 million on a revolving loan facility due in September 2020. The facility is secured by the assets and related net cash flow of this subsidiary and is non-recourse to the Company’s other assets. Loans under the facility bear interest at LIBOR +2.75% per annum for the senior secured loan, and LIBOR + 5.50% per annum for the subordinated loan.

As of December 31, 2018, a subsidiary of the Company has an outstanding balance of $20.8 million on a term loan due in April 2022. The loan is secured by the assets and related net cash flow of this subsidiary and is non-recourse to the Company’s other assets.

As of December 31, 2018, a subsidiary of the Company has an outstanding balance of $16.8 million on a secured, non-recourse loan agreement due in September 2022. The loan will be repaid through cash flows from a lease pass-through arrangement previously entered into by the Company. The loan agreement contains customary covenants including the requirement to maintain certain financial measurements and provide lender reporting. The loan also contains certain provisions in the event of default which entitles the lender to take certain actions including acceleration of amounts due under the loan. Loans under this facility bear interest at LIBOR +2.25% per annum.

As of December 31, 2018, a subsidiary of the Company has an outstanding balance of $118.6 million on a term loan due in January 2030. The loan is secured by the assets and related net cash flow of this subsidiary and is non-recourse to the Company’s other assets.

Securitization Loans

Each of the Company’s securitized loans contains customary covenants including the requirement to provide reporting to the indenture trustee and ratings agencies. Each of the securitized loans also contain certain provisions.
in the event of default which entitle the indenture trustee to take certain actions including acceleration of amounts due under the facilities and acquisition of membership interests and assets that are pledged to the lenders under the terms of the securitized loans. The facilities are non-recourse to the Company and are secured by net cash flows from Customer Agreements less certain operating, maintenance and other expenses which are available to the borrower after distributions to tax equity investors, where applicable. The Company was in compliance with all debt covenants as of December 31, 2018.

As of December 31, 2018, a subsidiary of the Company has an outstanding balance of $90.2 million on solar asset-backed notes ("Notes") secured by associated customer contracts ("Solar Assets") held by a special purpose entity ("Issuer"). As of December 31, 2018 and December 31, 2017, these Solar Assets had a carrying value of $164.7 million and $172.8 million, respectively, and are included under solar energy systems, net, in the consolidated balance sheets. The Notes were issued at a discount of 0.08%.

In connection with the transaction, the Company modified two pass-through arrangements with an investor. The modified pass-through arrangements require the majority of the cash flows generated by the Solar Assets to be passed on to the Issuer through monthly payments from the Fund investor. Those cash flows are used to service the monthly principal of the Notes and interest payments and satisfy the Issuer’s expenses, and any residual cash flows are retained by the Fund investor and recorded as a reduction in the remaining financing obligation. The Company recognizes revenue earned from the associated Customer Agreements in accordance with the Company’s revenue recognition policy. The assets and cash flows generated by the Solar Assets are not available to the other creditors of the Company, and the creditors of the Issuer, including the Note holders, have no recourse to the Company’s other assets.

As of December 31, 2018, a subsidiary of the Company has an outstanding balance of $309.8 million on solar asset-backed notes ("Notes") secured by associated customer contracts ("Solar Assets") held by a special purpose entity ("Issuer"). As of December 31, 2018, these Solar Assets had a carrying value of $72.0 million and are included under solar energy systems, net, in the consolidated balance sheets. The Notes were issued at a discount of 1.47%. The assets and cash flows generated by the Solar Assets are not available to the other creditors of the Company, and the creditors of the Issuer, including the Note holders, have no recourse to the Company’s other assets.

Notes Payable

The scheduled maturities of debt, excluding debt discount, as of December 31, 2018 are as follows (in thousands):

<table>
<thead>
<tr>
<th>Year</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>2019</td>
<td>$38,673</td>
</tr>
<tr>
<td>2020</td>
<td>418,572</td>
</tr>
<tr>
<td>2021</td>
<td>70,425</td>
</tr>
<tr>
<td>2022</td>
<td>66,463</td>
</tr>
<tr>
<td>2023</td>
<td>277,591</td>
</tr>
<tr>
<td>Thereafter</td>
<td>906,955</td>
</tr>
<tr>
<td>Subtotal</td>
<td>1,778,879</td>
</tr>
<tr>
<td>Less: Debt discount</td>
<td>(29,757 )</td>
</tr>
<tr>
<td>Total</td>
<td>$1,748,922</td>
</tr>
</tbody>
</table>

Note 13. Derivatives

Interest Rate Swaps

The Company uses interest rate swaps to hedge variable interest payments due on certain of its term loans and aggregation facility. These swaps allow the Company to incur fixed interest rates on these loans and receive payments based on variable interest rates with the swap counterparty based on the one or three month LIBOR on the notional amounts over the life of the swaps.

The interest rate swaps have been designated as cash flow hedges. The credit risk adjustment associated with these swaps is the risk of non-performance by the counterparties to the contracts. In the year ended
December 31, 2018, the hedge relationships on the Company’s interest rate swaps have been assessed as highly effective as the critical terms of the interest rate swaps match the critical terms of the underlying forecasted hedged transactions. Accordingly, changes in the fair value of these derivatives are recorded as a component of accumulated other comprehensive income, net of income taxes. Changes in the fair value of these derivatives are subsequently reclassified into earnings, and are included in interest expense, net in the Company’s statements of operations, in the period that the hedged forecasted transactions affects earnings.

The following table summarizes the post-tax amount of unrealized gain or loss recognized in Accumulated other comprehensive income (loss) ("OCI") in the consolidated statements of redeemable noncontrolling interests and stockholders’ equity (in thousands):

<table>
<thead>
<tr>
<th>Year Ended December 31,</th>
<th>2018</th>
<th>2017</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Derivatives designated as cash flow hedges:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Loss) gain in OCI at the beginning of the period</td>
<td>$ (4,113)</td>
<td>$ 437</td>
<td>$ (921)</td>
</tr>
<tr>
<td>Unrealized gain (loss) recognized in OCI (1)</td>
<td>6,187</td>
<td>(5,694)</td>
<td>335</td>
</tr>
<tr>
<td>Less: (Loss) gain reclassified from OCI to earnings (2)</td>
<td>(2,132)</td>
<td>1,144</td>
<td>1,023</td>
</tr>
<tr>
<td>Less: Cumulative effect of adoption of new ASU (No. 2017-12) (3)</td>
<td>1,992</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Less: Gain reclassified from OCI to Other expenses (income) in earnings (swap terminations) (4)</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Net gain (loss) on derivatives</td>
<td>989</td>
<td>(4,550)</td>
<td>1,358</td>
</tr>
<tr>
<td>(Loss) gain in OCI at the end of the period</td>
<td>$ (3,124)</td>
<td>$ (4,113)</td>
<td>$ 437</td>
</tr>
</tbody>
</table>

(1) Net of tax (expense) benefit of $(2,415), $3,611, $(220) as of December 31, 2018, 2017 and 2016, respectively.

(2) Net of tax benefit (expense) of $897, $(725), $(644) as of December 31, 2018, 2017 and 2016, respectively.

(3) Net of tax (expense) of $(687) as of December 31, 2018.

(4) Net of tax benefit of $1,847 as of December 31, 2018.

During the next 12 months, the Company expects to reclassify $1.0 million of net gains on derivative instruments from accumulated other comprehensive income to earnings. There were no undesignated derivative instruments recorded by the Company as of December 31, 2018.

The Company’s master netting and other similar arrangements allow net settlements under certain conditions. When those conditions are met, the Company presents derivatives at net fair value. As of December 31, 2018, the information related to these offsetting arrangements were as follows (in thousands):

<table>
<thead>
<tr>
<th>Instrument Description</th>
<th>Gross Amounts of Recognized Assets / Liabilities</th>
<th>Gross Amounts Offset in the Consolidated Balance Sheet</th>
<th>Net Amounts of Assets / Liabilities Included in the Consolidated Balance Sheet</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assets:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Derivatives</td>
<td>$</td>
<td>$ (1,605)</td>
<td>$ 5,353</td>
</tr>
<tr>
<td>Liabilities:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Derivatives</td>
<td>(11,910)</td>
<td>1,605</td>
<td>(10,305)</td>
</tr>
<tr>
<td>Total</td>
<td>$ (4,952)</td>
<td></td>
<td>$ (4,952)</td>
</tr>
</tbody>
</table>
At December 31, 2017, the Company had designated derivative instruments classified as hedges of variable interest payments as derivative assets that are reported in other assets of $1.9 million and derivative liabilities as reported in other liabilities of $8.6 million in the Company’s balance sheet. At December 31, 2018 the Company had the following derivative instruments (dollars in thousands):

<table>
<thead>
<tr>
<th>Type</th>
<th>Quantity</th>
<th>Effective Dates</th>
<th>Maturity Dates</th>
<th>Hedge Interest Rates</th>
<th>Notional Amount</th>
<th>Adjusted Fair Market Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interest rate swap</td>
<td>1</td>
<td>5/21/2018</td>
<td>9/20/2020</td>
<td>2.69%</td>
<td>$80,453</td>
<td>$(254)</td>
</tr>
<tr>
<td>Interest rate swap</td>
<td>1</td>
<td>4/29/2016</td>
<td>8/31/2022</td>
<td>1.27% - 1.29%</td>
<td>13,660</td>
<td>444</td>
</tr>
<tr>
<td>Interest rate swaps</td>
<td>10</td>
<td>7/31/2017 - 1/31/2019</td>
<td>4/30/2024 - 10/31/2024</td>
<td>2.16% - 2.69%</td>
<td>346,867</td>
<td>3,201</td>
</tr>
<tr>
<td>Interest rate swaps</td>
<td>3</td>
<td>4/30/2021</td>
<td>10/30/2026 - 10/31/2026</td>
<td>2.89% - 3.08%</td>
<td>102,720</td>
<td>(1,895)</td>
</tr>
<tr>
<td>Interest rate swap</td>
<td>1</td>
<td>10/22/2018</td>
<td>9/20/2027</td>
<td>2.97%</td>
<td>30,182</td>
<td>(669)</td>
</tr>
<tr>
<td>Interest rate swap</td>
<td>1</td>
<td>9/20/2020</td>
<td>6/20/2030</td>
<td>2.57%</td>
<td>6,013</td>
<td>(95)</td>
</tr>
<tr>
<td>Interest rate swap</td>
<td>1</td>
<td>9/20/2020</td>
<td>1/20/2031</td>
<td>2.61%</td>
<td>9,899</td>
<td>57</td>
</tr>
<tr>
<td>Interest rate swaps</td>
<td>5</td>
<td>1/31/2019 - 10/31/2024</td>
<td>7/31/2034</td>
<td>2.48% - 3.04%</td>
<td>144,379</td>
<td>1,049</td>
</tr>
<tr>
<td>Interest rate swaps</td>
<td>5</td>
<td>7/31/2017 - 4/30/2024</td>
<td>7/31/2035</td>
<td>2.56% - 2.95%</td>
<td>151,778</td>
<td>658</td>
</tr>
<tr>
<td>Interest rate swaps</td>
<td>5</td>
<td>1/31/2018 - 10/18/2024</td>
<td>10/31/2036</td>
<td>2.62% - 2.95%</td>
<td>183,529</td>
<td>648</td>
</tr>
<tr>
<td>Interest rate swaps</td>
<td>4</td>
<td>1/31/2019 - 4/30/2021</td>
<td>4/30/2037</td>
<td>3.25% - 3.30%</td>
<td>150,000</td>
<td>(7,268)</td>
</tr>
<tr>
<td>Interest rate swaps</td>
<td>3</td>
<td>10/30/2026 - 10/31/2026</td>
<td>1/31/2038</td>
<td>3.01% - 3.16%</td>
<td>101,135</td>
<td>(828)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$1,381,615</td>
<td>$(4,952)</td>
</tr>
</tbody>
</table>

**Note 14. Pass-Through Financing Obligations**

The Company's pass-through financing obligations ("financing obligations") arise when the Company leases solar energy systems to Fund investors who are considered commercial customers under a master lease agreement, and these investors in turn are assigned the Customer Agreements with customers. The Company receives all of the value attributable to the accelerated tax depreciation and some or all of the value attributable to the other incentives. Given the assignment of operating cash flows, these arrangements are accounted for as financing obligations. The Company also sells the rights and related value attributable to the ITC to these investors.

Under these financing obligation arrangements, wholly owned subsidiaries of the Company finance the cost of solar energy systems with investors for an initial term of typically 20 or 25 years. The solar energy systems are subject to Customer Agreements with an initial term of typically 20 or 25 years that automatically renew on an annual basis. These solar energy systems are reported under the line item solar energy systems, net in the consolidated balance sheets. As of December 31, 2018 and 2017, the cost of the solar energy systems placed in service under the financing obligation arrangements was $664.1 million and $464.2 million, respectively. The accumulated depreciation related to these assets as of December 31, 2018 and 2017 was $82.1 million and $63.7 million, respectively.

The investors make a series of large up-front payments and in certain cases subsequent smaller quarterly payments (lease payments) to the subsidiaries of the Company. The Company accounts for the payments received from the investors under the financing obligation arrangements as borrowings by recording the proceeds received.
as financing obligations on its consolidated balance sheets, and cash provided by financing activities in its consolidated statement of cash flows. These financing obligations are reduced over a period of approximately 22 years by customer payments under the Customer Agreements, U.S. Treasury grants (where applicable), incentive rebates (where applicable) and proceeds from the contracted resale of SRECs as they are received by the investor. In addition, funds paid for the ITC value upfront are initially recorded as a refund liability and recognized as revenue as the associated solar system reaches PTO. The ITC value is reflected in cash provided by operations on the consolidated statement of cash flows. The Company accounts for the Customer Agreements and any related U.S. Treasury grants or incentive rebates as well as the resale of SRECs consistent with the Company’s revenue recognition accounting policies as described in Note 2, Summary of Significant Accounting Policies.

Interest is calculated on the financing obligations using the effective interest rate method. The effective interest rate, which is adjusted on a prospective basis, is the interest rate that equates the present value of the estimated cash amounts to be received by the investor over the lease term with the present value of the cash amounts paid by the investor to the Company, adjusted for amounts received by the investor. The financing obligations are nonrecourse once the associated assets have been placed in service and all the contractual arrangements have been assigned to the investor.

Under the majority of the financing obligations, the investor has a right to extend its right to receive cash flows from the customers beyond the initial term in certain circumstances. Depending on the arrangement, the Company has the option to settle the outstanding financing obligation on the ninth or eleventh anniversary of the Fund inception at a price equal to the higher of (a) the fair value of future remaining cash flows or (b) the amount that would result in the investor earning their targeted return. In several of these financing obligations, the investor has an option to require repayment of the entire outstanding balance on the tenth anniversary of the Fund inception at a price equal to the fair value of the future remaining cash flows.

In one financing obligation arrangement, the investor has a right, on June 30, 2019, to purchase all of the systems leased at a price equal to the higher of (a) the sum of the present value of the expected remaining lease payments due by the investor, discounted at 5%, and the fair market value of the Company’s residual interest in the systems as determined through independent valuation or (b) a set value per kilowatt applied to the aggregate size of all leased systems.

Under all financing obligations, the Company is responsible for services such as warranty support, accounting, lease servicing and performance reporting to customers. As part of the warranty and performance guarantee with the customers, the Company guarantees certain specified minimum annual solar energy production output for the solar energy systems leased to the customers, which the Company accounts for as disclosed in Note 2, Summary of Significant Accounting Policies.
### Note 15. VIE Arrangements

The Company consolidated various VIEs at December 31, 2018 and 2017. The carrying amounts and classification of the VIEs’ assets and liabilities included in the consolidated balance sheets are as follows (in thousands):

| December 31,       |       |
|-------------------|--|---|
|                   | 2018 | 2017 |
| **Assets**        |      |     |
| **Current assets**|      |     |
| Cash              | $105,494 | $118,352 |
| Restricted cash   | 2,071  | 2,699  |
| Accounts receivable, net | 18,539  | 18,786  |
| Prepaid expenses and other current assets | 387  | 917  |
| **Total current assets** | 126,491 | 140,754 |
| Solar energy systems, net | 2,712,377 | 2,385,329 |
| Other assets      | 66,427 | 42,295 |
| **Total assets**  | $2,905,295 | $2,568,378 |
| **Liabilities**   |      |     |
| **Current liabilities** |      |     |
| Accounts payable | $12,136 | $15,929 |
| Distributions payable to noncontrolling interests and redeemable noncontrolling interests | 15,797 | 13,526 |
| Accrued expenses and other liabilities | 7,122 | 5,200 |
| Deferred revenue, current portion | 29,102 | 28,695 |
| Deferred grants, current portion | 982 | 1,021 |
| Non-recourse debt, current portion | 4,217 | 11,179 |
| **Total current liabilities** | 69,356 | 75,550 |
| Deferred revenue, net of current portion | 367,818 | 381,066 |
| Deferred grants, net of current portion | 28,247 | 29,385 |
| Non-recourse debt, net of current portion | 186,494 | 190,106 |
| Other liabilities | 8,843 | 1,848 |
| **Total liabilities** | $660,758 | $677,955 |

The Company holds a variable interest in an entity that provides the noncontrolling interest with a right to terminate the leasehold interests in all of the leased projects on the tenth anniversary of the effective date of the master lease. In this circumstance, the Company would be required to pay the noncontrolling interest an amount equal to the fair market value, as defined in the governing agreement of all leased projects as of that date.

The Company holds certain variable interests in nonconsolidated VIEs established as a result of seven pass-through Fund arrangements as further explained in Note 14, *Pass-Through Financing Obligations*. The Company does not have material exposure to losses as a result of its involvement with the VIEs in excess of the amount of the pass-through financing obligation recorded in the Company’s consolidated financial statements. The Company is not considered the primary beneficiary of these VIEs.

### Note 16. Redeemable Noncontrolling Interests

During certain specified periods of time (the “Early Exit Periods”), noncontrolling interests in certain funding arrangements have the right to put all of their membership interests to the Company (the “Put Provisions”). During a specific period of time (the “Call Periods”), the Company has the right to call all membership units of the related redeemable noncontrolling interests.
The carrying value of redeemable noncontrolling interests was greater than the redemption value except for six Funds at both December 31, 2018 and 2017, where the carrying value has been adjusted to the redemption value.

Note 17. Stockholders’ Equity

Convertible Preferred Stock

The Company did not have any convertible preferred stock issued and outstanding as of December 31, 2018 and 2017.

The Company has not declared or paid any dividends in 2018, 2017 or 2016.

Common Stock

The Company has reserved sufficient shares of common stock for issuance upon the exercise of stock options and the exercise of warrants. Common stockholders are entitled to dividends if and when declared by the board of directors, subject to the prior rights of the preferred stockholders. As of December 31, 2018, no common stock dividends had been declared by the board of directors.

The Company has reserved shares of common stock for issuance as follows (in thousands):

<table>
<thead>
<tr>
<th>Stock plans</th>
<th>December 31, 2018</th>
<th>December 31, 2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shares available for grant</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2015 Equity Incentive Plan</td>
<td>11,986</td>
<td>8,857</td>
</tr>
<tr>
<td>2015 Employee Stock Purchase Plan</td>
<td>5,202</td>
<td>3,970</td>
</tr>
<tr>
<td>Options outstanding</td>
<td>13,590</td>
<td>16,268</td>
</tr>
<tr>
<td>Restricted stock units outstanding</td>
<td>4,182</td>
<td>5,330</td>
</tr>
<tr>
<td>Total</td>
<td>34,960</td>
<td>34,425</td>
</tr>
</tbody>
</table>

Note 18. Stock-Based Compensation

MEC 2009 Stock Plan

In connection with the MEC acquisition in February 2014, the Company assumed nonstatutory stock options granted under the Mainstream Energy Corporation 2009 Stock Plan (the “MEC Plan”) held by MEC employees who continued employment with the Company after the closing and converted them into options to purchase shares of the Company’s common stock. The MEC Plan was terminated on the closing of the acquisition but the outstanding awards under the MEC Plan that the Company assumed in the acquisition will continue to be governed by their existing terms. As of December 31, 2018, options to purchase 262,971 shares of the Company’s common stock remained outstanding under the MEC Plan.

2013 Equity Incentive Plan

In July 2013, the Board of Directors approved the 2013 Plan. In March 2015, the Board of Directors authorized an additional 3,000,000 shares reserved for issuance under the 2013 Plan. An aggregate of 4,500,000 shares of common stock are reserved for issuance under the 2013 Plan plus (i) any shares that were reserved but not issued under the plan that was previously in place, and (ii) any shares subject to stock options or similar awards granted under the plan that was previously in place that expire or otherwise terminate without having been exercised in full and shares issued that are forfeited to or repurchased by the Company, with the maximum number of shares to be added to the 2013 Plan pursuant to clauses (i) and (ii) equal to 8,044,829 shares. Stock options granted to employees generally have a maximum term of ten-years and vest over a four-year period from the date of grant; 25% vest at the end of one year, and 75% vest monthly over the remaining three years. The options may include provisions permitting exercise of the option prior to full vesting. Any unvested shares shall be subject to repurchase by the Company at the original exercise price of the option in the event of a termination of an optionee’s
employment prior to vesting. All the remaining shares that were available for future grants under the 2013 Plan were transferred to the 2015 Equity Incentive Plan (“2015 Plan”) at the inception of the 2015 Plan. As of December 31, 2018, the Company had not granted restricted stock or other equity awards (other than options) under the 2013 Plan.

### 2014 Equity Incentive Plan

In August 2014, the Board approved the 2014 Equity Incentive Plan (“2014 Plan”). An aggregate of 947,342 shares of common stock are reserved for issuance under the 2014 Plan. The 2014 Plan was adopted to accommodate a broader transaction with a sales entity and to allow for similar transactions in the future. In July 2015, the Board approved an increase in the number of shares of common stock reserved to 1,197,342. As of July 2015, the Company granted all 1,197,342 restricted stock units (“RSUs”) available under the 2014 Plan.

### 2015 Equity Incentive Plan

In July 2015, the Board approved the 2015 Plan. An aggregate of 11,400,000 shares of common stock are reserved for issuance under the 2015 Plan plus (i) any shares that were reserved but not issued under the 2013 Plan at the inception of the 2015 Plan, and (ii) any shares subject to stock options or similar awards granted under the 2008 Plan, 2013 Plan and 2014 Plan that expire or otherwise terminate without having been exercised in full and shares issued that are forfeited or repurchased by the Company, with the maximum number of shares to be added to the 2015 Plan pursuant to clauses (i) and (ii) equal to 15,439,334 shares. The 2015 Plan provides for annual automatic increases on January 1 to the shares reserved for issuance. The automatic increase of the number of shares available for issuance under the 2015 Plan is equal to the least of 10 million shares, 4% of the outstanding shares of common stock as of the last day of our immediately preceding fiscal year or such other amount as the Board of Directors may determine. In 2018 and 2017, the Board of Directors authorized an additional 4,294,010 and 4,172,883 shares reserved for issuance under the 2015 Plan, respectively. Stock options granted to employees generally have a maximum term of ten-years and vest over a four-year period from the date of grant; 25% vest at the end of one year, and 75% vest monthly over the remaining three years. The options may include provisions permitting exercise of the option prior to full vesting. Any unvested shares shall be subject to repurchase by the Company at the original exercise price of the option in the event of a termination of an optionee’s employment prior to vesting. RSUs granted to employees generally vest over a four-year period from the date of grant; 25% vest at the end of one year, and 75% vest quarterly over the remaining three years.

### Stock Options

The following table summarizes the activity for all stock options under all of the Company’s equity incentive plans for the years ended December 31, 2018 and 2017 (shares and aggregate intrinsic value in thousands):  

<table>
<thead>
<tr>
<th>Description</th>
<th>Number of Options</th>
<th>Weighted Average Exercise Price</th>
<th>Weighted Average Remaining Contractual Life</th>
<th>Aggregate Intrinsic Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outstanding at December 31, 2016</td>
<td>12,897</td>
<td>$5.94</td>
<td>7.49</td>
<td>$9,625</td>
</tr>
<tr>
<td>Granted</td>
<td>5,266</td>
<td>5.17</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exercised</td>
<td>(687)</td>
<td>2.96</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cancelled</td>
<td>(1,208)</td>
<td>7.62</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Outstanding at December 31, 2017</td>
<td>16,268</td>
<td>5.70</td>
<td>7.41</td>
<td>$14,832</td>
</tr>
<tr>
<td>Granted</td>
<td>1,529</td>
<td>8.63</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exercised</td>
<td>(3,271)</td>
<td>5.23</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cancelled</td>
<td>(936)</td>
<td>6.63</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Outstanding at December 31, 2018</td>
<td>13,590</td>
<td>$6.07</td>
<td>6.63</td>
<td>$66,462</td>
</tr>
<tr>
<td>Options vested and exercisable at December 31, 2018</td>
<td>7,974</td>
<td>$5.64</td>
<td>5.52</td>
<td>$42,504</td>
</tr>
<tr>
<td>Options vested and expected to vest at December 31, 2018</td>
<td>13,590</td>
<td>$6.07</td>
<td>6.63</td>
<td>$66,462</td>
</tr>
</tbody>
</table>
There were 276,660 unvested exercisable shares as of the years ended December 31, 2018 and 2017, which are subject to a repurchase option held by the Company at the original exercise price. These exercisable but unvested shares have a weighted average remaining vesting period of less than a year. There was no exercise of unvested options in the year ended December 31, 2018 and 2017.

The weighted-average grant-date fair value of stock options granted during the year ended December 31, 2018, 2017 and 2016 were $4.21, $2.57 and $2.26 per share, respectively. The total intrinsic value of the options exercised during the year ended December 31, 2018, 2017 and 2016 was $21.4 million, $2.3 million and $6.3 million, respectively. The aggregate intrinsic value is the difference of the current fair value of the stock and the exercise price for in-the-money stock options. The total fair value of options vested during the year ended December 31, 2018, 2017 and 2016 was $8.8 million, $7.5 million and $9.8 million, respectively.

The Company estimates the fair value of stock-based awards on their grant date using the Black-Scholes option-pricing model. The Company estimates the fair value using a single-option approach and amortizes the fair value on a straight-line basis for options expected to vest. All options are amortized over the requisite service periods of the awards, which are generally the vesting periods.

The Company estimated the fair value of stock options with the following assumptions:

<table>
<thead>
<tr>
<th></th>
<th>2018</th>
<th>2017</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Risk-free interest rate</td>
<td>2.72% - 2.92%</td>
<td>1.88% - 2.22%</td>
<td>1.18% - 2.23%</td>
</tr>
<tr>
<td>Volatility</td>
<td>44.87% - 54.61%</td>
<td>45.95% - 50.52%</td>
<td>36.00% - 49.64%</td>
</tr>
<tr>
<td>Expected term (in years)</td>
<td>6.09 - 6.11</td>
<td>5.94 - 6.08</td>
<td>5.00 - 6.26</td>
</tr>
<tr>
<td>Expected dividend yield</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
</tr>
</tbody>
</table>

The expected term assumptions were determined based on the average vesting terms and contractual lives of the options. The risk-free interest rate is based on the rate for a U.S. Treasury zero-coupon issue with a term that approximates the expected life of the option grant. For stock options granted in the year ended December 31, 2018, 2017 and 2016, the Company considered the volatility data of a group of publicly traded peer companies in its industry. The Company accounts for forfeitures as they occur and, as such, reverses compensation cost previously recognized in the period the award is forfeited, for an award that is forfeited before completion of the requisite service period.

**Restricted Stock Units**

In 2014, the Company granted a total of 947,342 RSUs subject to certain performance targets to a third party partner. As of December 31, 2017, 350,000 outstanding RSUs had a performance feature that is required to be satisfied before the option is vested. In March 2018, the Company amended the terms of all of these RSUs, such that the RSUs are deemed earned subject to a clawback provision that requires the holder of the RSUs to either forfeit all the RSUs or pay the Company repayment value for all RSUs that are not forfeited if the third party breaches the exclusivity provision of the parties’ commercial agreement. The exclusivity clawback provision for all of the RSUs expires in September 2019.

The performance-based provision is considered substantive. As a result, the Company recognizes expense once the performance targets are met. The first performance target was met in 2015. The Company recognized $3.5 million, $0.8 million and $1.2 million compensation expense in the years ended December 31, 2018, 2017 and 2016 upon certain performance targets being met.
The following table summarizes the activity for all RSUs under all of the Company’s equity incentive plans for the years ended December 31, 2018 and 2017 (shares in thousands):

<table>
<thead>
<tr>
<th>Shares</th>
<th>Weighted Average Grant Date Fair Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unvested balance at December 31, 2016</td>
<td>4,106</td>
</tr>
<tr>
<td>Granted</td>
<td>3,540</td>
</tr>
<tr>
<td>Issued</td>
<td>(1,115)</td>
</tr>
<tr>
<td>Cancelled / forfeited</td>
<td>(1,201)</td>
</tr>
<tr>
<td>Unvested balance at December 31, 2017</td>
<td>5,330</td>
</tr>
<tr>
<td>Granted</td>
<td>2,019</td>
</tr>
<tr>
<td>Issued</td>
<td>(1,720)</td>
</tr>
<tr>
<td>Cancelled / forfeited</td>
<td>(1,447)</td>
</tr>
<tr>
<td>Unvested balance at December 31, 2018</td>
<td>4,182</td>
</tr>
</tbody>
</table>

Employee Stock Purchase Plan

Under the Company’s 2015 Employee Stock Purchase Plan ("ESPP") (as amended in May 2017), eligible employees are offered shares bi-annually through a 24 month offering period which encompasses four six month purchase periods. Each purchase period begins on the first trading day on or after May 15 and November 15 of each year. Employees may purchase a limited number of shares of the Company’s common stock via regular payroll deductions at a discount of 15% of the lower of the fair market value of the Company’s common stock on the first trading date of each offering period or on the exercise date. Employees may deduct up to 15% of payroll, with a cap of $25,000 of fair market value of shares in any calendar year and 10,000 shares per employee per purchase period. Under the ESPP, 1,000,000 shares of the Company’s common stock have been reserved for issuance to eligible employees. The ESPP provides for an automatic increase of the number of shares available for issuance under the ESPP on the first day of each fiscal year beginning on January 1, 2016, equal to the least of 5 million shares, 2% of the outstanding shares of our common stock on the last day of the immediately preceding fiscal year, or such other amount as may be determined by the Board of Directors. In 2018 and 2017, the Board of Directors authorized an additional 2,147,005 and 2,086,416 shares, respectively, reserved for issuance under the ESPP.

Stock-Based Compensation Expense

The Company recognized stock-based compensation expense, including ESPP expenses, in the consolidated statements of operations as follows (in thousands):

<table>
<thead>
<tr>
<th>Year Ended December 31,</th>
<th>2018</th>
<th>2017</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost of customer agreements and incentives</td>
<td>$2,568</td>
<td>$2,299</td>
<td>$2,039</td>
</tr>
<tr>
<td>Cost of solar energy systems and product sales</td>
<td>718</td>
<td>609</td>
<td>409</td>
</tr>
<tr>
<td>Sales and marketing</td>
<td>7,191</td>
<td>5,196</td>
<td>7,831</td>
</tr>
<tr>
<td>Research and development</td>
<td>1,253</td>
<td>836</td>
<td>515</td>
</tr>
<tr>
<td>General and administration</td>
<td>16,126</td>
<td>13,102</td>
<td>7,929</td>
</tr>
<tr>
<td>Total</td>
<td>$27,856</td>
<td>$22,042</td>
<td>$18,723</td>
</tr>
</tbody>
</table>

As of December 31, 2018 and 2017, total unrecognized compensation cost related to outstanding stock options and RSUs was $40.0 million and $34.8 million, respectively, which is expected to be recognized over a weighted-average period of 2.3 years and 2.8 years, respectively.

In August 2017, the Company entered into an agreement with an affiliate ("Contractor") of Comcast Corporation ("Comcast") whereby Contractor will receive lead or sales fees for new customers it brings to the Company over a 40-month term. Comcast may also earn a warrant to purchase up to 11,793,355 shares of the Company's outstanding common stock, at an exercise price of $0.01 per warrant share. The warrant initially vests 50.05% when both (i) Contractor has earned a lead or sales fee with respect to 30,000 of installed solar
energy systems, and (ii) Contractor or its affiliates have spent at least $10.0 million in marketing and sales in connection with the agreement. Thereafter, the warrant will vest in five additional increments for each additional 6,000 installed solar energy systems. On November 7, 2018 the warrant vesting schedule was modified so that it will initially vest either (i) as to 10.0% if Contractor has earned a lead or sales fee with respect to 6,000 of installed solar energy systems by September 30, 2019 or (ii) as to 13.3% if Contractor has earned a lead or sales fee with respect to 8,000 of installed solar energy systems by December 31, 2019, provided that, in either case, Contractor or its affiliates have spent at least $25.0 million in marketing and sales in connection with the agreement. Thereafter, the warrant will vest in additional 8.3% increments for each additional 5,000 installed solar energy systems. If the initial vesting conditions have not been met by December 31, 2019, the Warrant will expire. As of February 28, 2019, none of the shares under this amended warrant have vested and, therefore, the modification has no current financial statement effect as no expense has been recognized to date based on the terms of the award.

Note 19. Income Taxes

The following table presents the (income) loss before income taxes for the periods presented (in thousands):

<table>
<thead>
<tr>
<th></th>
<th>For the Year Ended December 31,</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2018</td>
</tr>
<tr>
<td>Income attributable to common stockholders</td>
<td>$ (35,979)</td>
</tr>
<tr>
<td>Loss attributable to noncontrolling interest and redeemable noncontrolling interests</td>
<td>286,843</td>
</tr>
<tr>
<td>Loss before income taxes</td>
<td>$ 250,864</td>
</tr>
</tbody>
</table>

The income tax provision (benefit) consists of the following (in thousands):

<table>
<thead>
<tr>
<th></th>
<th>For the Year Ended December 31,</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2018</td>
</tr>
<tr>
<td>Current</td>
<td></td>
</tr>
<tr>
<td>Federal</td>
<td>$ (1,100)</td>
</tr>
<tr>
<td>State</td>
<td>292</td>
</tr>
<tr>
<td>Total current expense</td>
<td>(808)</td>
</tr>
<tr>
<td>Deferred</td>
<td></td>
</tr>
<tr>
<td>Federal</td>
<td>1,995</td>
</tr>
<tr>
<td>State</td>
<td>8,135</td>
</tr>
<tr>
<td>Total deferred provision</td>
<td>10,130</td>
</tr>
<tr>
<td>Total</td>
<td>$ 9,322</td>
</tr>
</tbody>
</table>

The following table represents a reconciliation of the statutory federal rate and the Company’s effective tax rate for the periods presented:

<table>
<thead>
<tr>
<th></th>
<th>For the Year Ended December 31,</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2018</td>
</tr>
<tr>
<td>Tax provision (benefit) at federal statutory rate</td>
<td>(21.00)%</td>
</tr>
<tr>
<td>State income taxes, net of federal benefit</td>
<td>0.32</td>
</tr>
<tr>
<td>Effect of noncontrolling and redeemable noncontrolling interests</td>
<td>24.01</td>
</tr>
<tr>
<td>Stock-based compensation</td>
<td>(1.77)</td>
</tr>
<tr>
<td>Effect of prepaid tax asset</td>
<td>—</td>
</tr>
<tr>
<td>Tax credits</td>
<td>(1.35)</td>
</tr>
<tr>
<td>Effect of federal rate change</td>
<td>—</td>
</tr>
<tr>
<td>Effect of valuation allowance</td>
<td>3.04</td>
</tr>
<tr>
<td>Other</td>
<td>0.47</td>
</tr>
<tr>
<td>Total</td>
<td>3.72 %</td>
</tr>
</tbody>
</table>
Deferred income taxes reflect the net tax effects of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes. The following table represents the components of the Company’s deferred tax assets and liabilities for the periods presented (in thousands):

<table>
<thead>
<tr>
<th></th>
<th>December 31, 2018</th>
<th>December 31, 2017</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Deferred tax assets</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accruals and prepaids</td>
<td>$18,871</td>
<td>$14,387</td>
</tr>
<tr>
<td>Deferred revenue</td>
<td>—</td>
<td>7,602</td>
</tr>
<tr>
<td>Net operating loss carryforwards</td>
<td>288,039</td>
<td>187,038</td>
</tr>
<tr>
<td>Stock-based compensation</td>
<td>5,681</td>
<td>4,994</td>
</tr>
<tr>
<td>Investment tax and other credits</td>
<td>28,551</td>
<td>22,940</td>
</tr>
<tr>
<td>Interest Expense</td>
<td>9,614</td>
<td>—</td>
</tr>
<tr>
<td>Interest rate derivatives</td>
<td>1,282</td>
<td>1,640</td>
</tr>
<tr>
<td><strong>Total deferred tax assets</strong></td>
<td>352,038</td>
<td>238,601</td>
</tr>
<tr>
<td>Less: Valuation allowance</td>
<td>(10,506)</td>
<td>(2,892)</td>
</tr>
<tr>
<td><strong>Gross deferred tax assets</strong></td>
<td>341,532</td>
<td>235,709</td>
</tr>
<tr>
<td><strong>Deferred tax liabilities</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Deferred revenue</td>
<td>17,526</td>
<td>—</td>
</tr>
<tr>
<td>Capitalized initial direct costs</td>
<td>54,823</td>
<td>38,751</td>
</tr>
<tr>
<td>Fixed asset depreciation</td>
<td>218,701</td>
<td>173,175</td>
</tr>
<tr>
<td>Deferred tax on investment in partnerships</td>
<td>144,115</td>
<td>106,902</td>
</tr>
<tr>
<td><strong>Gross deferred tax liabilities</strong></td>
<td>435,165</td>
<td>318,828</td>
</tr>
<tr>
<td><strong>Net deferred tax liabilities</strong></td>
<td>$ (93,633)</td>
<td>$(83,119)</td>
</tr>
</tbody>
</table>

As of December 31, 2018, the Company has an investment tax credit carryforward of approximately $14.9 million which begins to expire in the year 2028, if not utilized and $1.0 million of California enterprise zone credits which begin to expire in the year 2023. As of December 31, 2017, the Company has an investment tax credit carryforward of approximately $11.5 million and California enterprise zone credits of approximately $1.0 million.

Generally, utilization of the net operating loss carryforwards and credits may be subject to a substantial annual limitation due to the ownership change limitations provided by the Internal Revenue Code (IRC) of 1986, as amended and similar state provisions. The Company performed an analysis to determine whether an ownership change under Section 382 of the Code had occurred and determined that no ownership changes were identified as of December 31, 2018.

Valuation allowances are provided against deferred tax assets to the extent that it is more likely than not that the deferred tax asset will not be realized. The Company’s management considers all available positive and negative evidence including its history of operating income or losses, future reversals of existing taxable temporary difference, taxable income in carryback years and tax-planning strategies. The Company has concluded that it is more likely than not that the benefit from certain federal tax credits, state net operating loss carryforwards, and state tax credits will not be realized. In recognition of this risk, the Company has provided a valuation allowance of $10.5 million on the deferred tax assets relating to these federal tax credits, state net operating loss carryforwards, and state tax credits which is an increase of $7.6 million in 2018.

The Company sells solar energy systems to investment Funds. As the investment Funds are consolidated by the Company, the gain on the sale of the assets has been eliminated in the consolidated financial statements. These transactions are treated as intercompany sales and any tax expense incurred related to these sales prior to fiscal year 2017 was deferred. As described in Note 2, Summary of Significant Accounting Policies — Recently Issued Accounting Standards, ASU 2016-16, Intra-Entity Transfers of Assets Other Than Inventory, requires entities to recognize income tax consequences of an intra-entity transfer of an asset other than inventory when the transfer occurs. As a result, a reporting entity would recognize the tax expense from the sale of assets in the seller’s tax jurisdiction when the transfer occurs, even though the pre-tax effects of the transaction are eliminated in the
consolidated financial statements. Any deferred tax asset that arises in the buyer’s jurisdiction would also be recognized at the time of the transfer. As the Company sells solar energy systems to Funds, the Company records the current tax effect of the gain on the sale as well as a deferred tax asset related to the Company’s increased tax basis in the partnership as a result of the sale. With the adoption of ASU 2016-16 on January 1, 2017 the Company reversed net prepaid tax assets of $378.5 million and recorded the gross deferred tax assets associated with the historical intercompany sales of solar energy systems, which in turn reduced the deferred tax liabilities on investment in partnerships by $378.2 million with the remaining $0.3 million being recorded as a cumulative effect of adoption in the Company’s Consolidated Statements of Redeemable Noncontrolling Interest and Stockholders’ Equity. The adoption did not have an impact on the Company’s Consolidated Statement of Operations.

The Company adopted ASU 2016-09, Compensation – Stock Compensation (Topic 718): Improvements to Employee Share-Based Payment Accounting, on January 1, 2017. As a result of the adoption, the Company has increased its federal and state deferred tax assets by $3.3 million for the cumulative unrecognized federal and state gross windfall net operating loss carryover at December 31, 2016 of $8.6 million and $6.8 million, respectively, with an offsetting adjustment to retained earnings of $3.3 million.

**Tax Cuts and Jobs Act**

On December 22, 2017, the US government enacted comprehensive tax legislation commonly referred to as the Tax Cuts and Jobs Act (the "Tax Act"). The Tax Act makes broad and complex changes to the US tax code including but not limited to, (1) reducing the US federal corporate tax rate from 35% to 21%; (2) immediate expensing of certain tangible personal property (3) creating a new limitation on deductible interest expense; (4) enacting special rules for taxable year of inclusion for certain revenues and (5) changing rules related to the uses and limitations of net operating loss carryforwards created in tax years beginning after December 31, 2017.

On December 22, 2017, the SEC staff issued Staff Accounting Bulletin No. 118 ("SAB 118") which provides guidance on accounting for the tax effects of the Tax Act. SAB 118 provides a measurement period that should not extend beyond one year from the Tax Act enactment date for companies to complete the accounting under ASC 740, Income taxes. In accordance with SAB 118 a company must reflect the income tax effects of those aspects of the Tax Act for which the accounting under ASC 740 is complete. For 2017, and the first nine months of 2018, the Company recorded provisional amounts for changes due to the Tax Act because we had not yet completed our analysis of the tax expense related to the enactment-date effects of the Tax Act that included performance-based compensation plans within the new definitions under IRC Section 162(m) of the Internal Revenue Code.

In its final assessment of the Tax Act, the Company believes that performance based compensation provided prior to November 2, 2017 was provided pursuant to a written binding agreement and will be deductible. No adjustment has been made to current or deferred income tax expense in 2017 or 2018. While we have fully accounted for the impact of the Tax Act, the Company will continue to monitor additional clarification and guidance from the IRS, including guidance related to Section 451(c) income recognition. As of December 31, 2018, the Company has completed its accounting for all of the enactment-date income tax effects of the Act.

**Uncertain Tax Positions**

The Company files tax returns as prescribed by the tax laws of the jurisdictions in which it operates. In the normal course of business, the Company is subject to examination by federal, state and local jurisdictions, where applicable. The statute of limitations for the tax returns varies by jurisdictions.

We determine whether a tax position is more likely than not to be sustained upon examination, including resolution of any related appeals or litigation processes, based on the technical merits of the position. We use a two-step approach to recognize and measure uncertain tax positions. The first step is to evaluate the tax position for recognition by determining if the weight of available evidence indicates that it is more likely than not that the position will be sustained upon tax authority examination, including resolution of related appeals or litigation processes, if any. The second step is to measure the tax benefit as the largest amount that is more than 50% likely of being realized upon ultimate settlement. We have analyzed the Company’s inventory of tax positions with respect to all applicable income tax issues for all open tax years (in each respective jurisdiction).
Our policy is to include interest and penalties related to unrecognized tax benefits, if any, within the provision for taxes in the consolidated statements of operations.

As of December 31, 2018 and 2017, the Company had $0.6 million and $1.5 million, respectively, of unrecognized tax benefits related to an acquisition in 2015. In addition, there was $0.2 million and $0.4 million of interest and penalties for uncertain tax positions as of December 31, 2018 and 2017, respectively. During the 12 months ended December 31, 2018, the Company recorded an income tax benefit of $1.1 million, including penalties and interest, due to the expiration of federal and California statute of limitations. This benefit was fully offset by an indemnification asset that was written down to zero through operating expenses during the year. Due to the expiration of federal and California statute of limitations, the Company expects the total amount of gross unrecognized tax benefits will decrease by $0.6 million within 12 months of December 31, 2018.

The change in unrecognized tax benefits during 2018, 2017 and 2016, excluding penalties and interest, is as follows:

<table>
<thead>
<tr>
<th>For the Year Ended December 31,</th>
<th>2018</th>
<th>2017</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unrecognized tax benefits at beginning of the year</td>
<td>$1,525</td>
<td>$1,525</td>
<td>$1,525</td>
</tr>
<tr>
<td>Reversal of prior year unrecognized tax benefits due to the expiration of the statute of limitations</td>
<td>(878)</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Unrecognized tax benefits at end of the year</td>
<td>$647</td>
<td>$1,525</td>
<td>$1,525</td>
</tr>
</tbody>
</table>

One of our investment funds has recently been selected for audit by the Internal Revenue Service (the “IRS”). In addition, three of our investors are currently being audited by the IRS, and these investor audits involve a review of the fair market value determination of our solar energy systems. If these investor audits result in an adverse finding, we would be subject to an indemnity obligation to these investors. The Company is subject to taxation and files income tax returns in the U.S., its territories, and various state and local jurisdictions. Due to the Company’s net losses, substantially all of its federal, state and local income tax returns since inception are still subject to audit.

The following table summarizes the tax years that remain open and subject to examination by the tax authorities in the most significant jurisdictions in which the Company operates:

<table>
<thead>
<tr>
<th>U.S. Federal</th>
<th>Tax Years</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2015 - 2018</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>State</th>
<th>Tax Years</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2014 - 2018</td>
</tr>
</tbody>
</table>

Net Operating Loss Carryforwards

As a result of the Company’s net operating loss carryforwards as of December 31, 2018, the Company does not expect to pay income tax, including in connection with its income tax provision for the year ended December 31, 2018 until the Company’s net operating losses are fully utilized. As of December 31, 2018, the Company had net operating loss carryforwards for federal, California and other state income tax purposes of approximately $1.1 billion, $576.9 million and $535.8 million, respectively, which will begin to expire in the year 2028, 2028 and 2024, respectively, if not utilized. Federal and certain state net operating loss carryforwards generated in 2018 have indefinite carryover periods and do not expire. The Company performed an analysis to determine whether an ownership change under Section 382 of the Code had occurred and determined that no ownership changes were identified as of December 31, 2018.

Note 20. Commitments and Contingencies

Letters of Credit

As of December 31, 2018 and 2017, the Company had $9.7 million and $16.4 million, respectively, of unused letters of credit outstanding, which carry fees of 2.5 - 3.25% per annum and 2.50 - 3.25% per annum, respectively.
Operating and Finance Leases

The Company leases real estate under non-cancellable operating leases and equipment under finance leases.

The components of lease expense were as follows (in thousands):

<table>
<thead>
<tr>
<th></th>
<th>2018</th>
<th>2017</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Finance lease cost:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Amortization of right-of-use assets</td>
<td>$11,884</td>
<td>$11,029</td>
<td>$11,252</td>
</tr>
<tr>
<td>Interest on lease liabilities</td>
<td>676</td>
<td>640</td>
<td>889</td>
</tr>
<tr>
<td>Operating lease cost</td>
<td>10,467</td>
<td>10,177</td>
<td>9,380</td>
</tr>
<tr>
<td>Short-term lease cost</td>
<td>732</td>
<td>493</td>
<td>1,103</td>
</tr>
<tr>
<td>Variable lease cost</td>
<td>3,112</td>
<td>2,502</td>
<td>2,173</td>
</tr>
<tr>
<td>Sublease income</td>
<td>(572)</td>
<td>(24)</td>
<td>(79)</td>
</tr>
<tr>
<td><strong>Total lease cost</strong></td>
<td><strong>$26,299</strong></td>
<td><strong>$24,817</strong></td>
<td><strong>$24,718</strong></td>
</tr>
</tbody>
</table>

Other information related to leases was as follows (in thousands):

<table>
<thead>
<tr>
<th></th>
<th>2018</th>
<th>2017</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash paid for amounts included in the measurement of lease liabilities</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operating cash flows from operating leases</td>
<td>$10,765</td>
<td>$10,027</td>
<td>$8,345</td>
</tr>
<tr>
<td>Operating cash flows from finance leases</td>
<td>482</td>
<td>591</td>
<td>885</td>
</tr>
<tr>
<td>Financing cash flows from finance leases</td>
<td>9,220</td>
<td>10,032</td>
<td>12,968</td>
</tr>
<tr>
<td>Right-of-use assets obtained in exchange for lease obligations:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operating leases</td>
<td>3,411</td>
<td>7,276</td>
<td>5,913</td>
</tr>
<tr>
<td>Finance leases</td>
<td>15,370</td>
<td>862</td>
<td>14,875</td>
</tr>
<tr>
<td>Weighted average remaining lease term (years):</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operating leases</td>
<td>3.43</td>
<td>3.99</td>
<td>4.28</td>
</tr>
<tr>
<td>Finance leases</td>
<td>3.37</td>
<td>2.06</td>
<td>2.83</td>
</tr>
<tr>
<td>Weighted average discount rate:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operating leases</td>
<td>4.3%</td>
<td>4.1%</td>
<td>3.9%</td>
</tr>
<tr>
<td>Finance leases</td>
<td>4.3%</td>
<td>3.1%</td>
<td>3.0%</td>
</tr>
</tbody>
</table>

103
Future minimum lease payments under non-cancellable leases as of December 31, 2018 were as follows (in thousands):

<table>
<thead>
<tr>
<th>Year</th>
<th>Operating Leases</th>
<th>Sublease Income</th>
<th>Net Operating Leases</th>
<th>Finance Leases</th>
</tr>
</thead>
<tbody>
<tr>
<td>2019</td>
<td>$9,494</td>
<td>$774</td>
<td>$8,720</td>
<td>$9,742</td>
</tr>
<tr>
<td>2020</td>
<td>$6,224</td>
<td>787</td>
<td>5,437</td>
<td>4,806</td>
</tr>
<tr>
<td>2021</td>
<td>4,194</td>
<td>639</td>
<td>3,555</td>
<td>3,103</td>
</tr>
<tr>
<td>2022</td>
<td>2,677</td>
<td>—</td>
<td>2,677</td>
<td>1,503</td>
</tr>
<tr>
<td>2023</td>
<td>1,774</td>
<td>—</td>
<td>1,774</td>
<td>57</td>
</tr>
<tr>
<td>Thereafter</td>
<td>25</td>
<td>—</td>
<td>25</td>
<td>949</td>
</tr>
</tbody>
</table>

Total future lease payments $24,388 $2,200 $22,188 $20,160

Less: Amount representing interest $(1,602) — $(1,602) $(975)

Present value of future payments $22,786 $2,200 $20,586 $19,185

Less: Short term leases not recorded as a liability $(748) — $(748) —

Revised Present value of future payments $22,038 $2,200 $19,838 $19,185

Less: Current portion $(7,857) — $(7,857) $(9,193)

Long term portion $14,181 $2,200 $11,981 $9,992

Purchase Commitment

The Company entered into purchase commitments, which have the ability to be canceled without significant penalties, with multiple suppliers to purchase $135.4 million of photovoltaic modules and inverters by the end of 2019.

Warranty Accrual

The Company accrues warranty costs when revenue is recognized for solar energy systems sales, based on the estimated future costs of meeting its warranty obligations. Warranty costs primarily consist of replacement costs for supplies and labor costs for service personnel since warranties for equipment and materials are covered by the original manufacturer’s warranty (other than a small deductible in certain cases). As such, the warranty reserve is immaterial in all periods presented. The Company makes and revises these estimates based on the number of solar energy systems under warranty, the Company’s historical experience with warranty claims, assumptions on warranty claims to occur over a systems’ warranty period and the Company’s estimated replacement costs.

ITC and Cash Grant Indemnification

The Company is contractually committed to compensate certain investors for any losses that they may suffer in certain limited circumstances resulting from reductions in ITCs or U.S. Treasury grants. Generally, such obligations would arise as a result of reductions to the value of the underlying solar energy systems as assessed by the Internal Revenue Service (the “IRS”). At each balance sheet date, the Company assesses and recognizes, when applicable, the potential exposure from this obligation based on all the information available at that time, including any audits undertaken by the IRS. The Company believes that this obligation is not probable based on the facts known as of the filing date of this Annual Report on Form 10-K. The maximum potential future payments that the Company could have to make under this obligation would depend largely on the difference between the prices at which the solar energy systems were sold or transferred to the Funds (or, in certain structures, the fair market value claimed in respect of such systems (referred to as “claimed values”)) and the eligible basis determined by the IRS. The Company set the purchase prices and claimed values based on fair market values determined with the assistance of an independent third-party appraisal with respect to the systems that generate ITCs that are passed-through to and claimed by the Fund investors. Since the Company cannot determine how the IRS may evaluate system values used in claiming ITCs, the Company is unable to reliably estimate the maximum potential future payments that it could have to make under this obligation as of each balance sheet date, though any potential future payments are mitigated by the insurance policy described below. In April 2018, the Company purchased an insurance policy providing for certain payments by the insurers in the event there is any final determination (including a judicial determination) that reduced the ITCs claimed in respect of solar energy systems sold or
transferred to most Funds through April 2018, or later, in the case of Funds added to the policy after such date. In general, the policy indemnifies the Company and related parties for additional taxes (including penalties and interest) owed in respect of lost ITCs, gross-up costs and expenses incurred in defending such claim, subject to negotiated exclusions from, and limitations to, coverage.

Litigation

The Company is subject to certain legal proceedings, claims, investigations and administrative proceedings in the ordinary course of its business. The Company records a provision for a liability when it is both probable that the liability has been incurred and the amount of the liability can be reasonably estimated. These provisions, if any, are reviewed at least quarterly and adjusted to reflect the impacts of negotiations, settlements, rulings, advice of legal counsel and other information and events pertaining to a particular case. Depending on the nature and timing of any such proceedings that may arise, an unfavorable resolution of a matter could materially affect the Company’s future consolidated results of operations, cash flows or financial position in a particular period.

On November 20, 2015, a purported shareholder class action captioned Slovín et al. v. Sunrun Inc. and Clean Energy Experts, LLC, Case No. 4:15-cv-05340, was filed in the United States District Court, Northern District of California. The complaint generally alleged violations of the Telephone Consumer Protection Act (the “TCPA”) on behalf of an individual and putative classes of persons alleged to be similarly situated. Plaintiffs filed a First Amended Complaint on December 2, 2015, and a Second Amended Complaint on March 25, 2016, also asserting individual and putative class claims under the TCPA. By Order entered on April 28, 2016, the Court granted the Company’s motion to strike the class allegations set forth in the Second Amended Complaint, and granted leave to amend. Plaintiffs filed a Third Amended Complaint on July 12, 2016 asserting individual and putative class claims under the TCPA. On October 12, 2016, the Court denied the Company’s motion to again strike the class allegations set forth in the Third Amended Complaint. On October 3, 2017, plaintiffs filed a motion for leave to file a Fourth Amended Complaint, seeking to, among other things, revise the definitions of the classes that plaintiffs seek to represent. In each iteration of their complaint, plaintiffs seek statutory damages, equitable and injunctive relief, and attorneys’ fees and costs, on behalf of themselves and the absent classes. On April 12, 2018, the Company and plaintiffs advised the Court that they reached a settlement in principle, and the Court vacated all deadlines relating to the motion for class certification. On September 27, 2018, Plaintiffs filed a motion for preliminary approval to settle all claims against the Company for $5.5 million, which was accrued as of March 31, 2018. On November 27, 2018, a hearing was held on Plaintiff’s motion for preliminary approval. The Court requested certain clarifications be made to the proposed settlement agreement and notice documents. On January 11, 2019, Plaintiffs filed revised settlement documents reflecting the changes requested by the Court, and on January 29, 2019, the Court granted preliminary approval of the settlement.

Most, if not all, of the claims asserted in the lawsuit relate to activities allegedly engaged in by third-party vendors, for which the Company denies any responsibility. The vendors are contractually obligated to indemnify the Company for losses related to the conduct alleged. The Company has denied, and continues to deny, the claims alleged and the settlement does not reflect any admission of fault, wrongdoing or liability. The settlement is subject to definitive documentation, class notice and court approval.

On April 13, 2016, a purported shareholder class action captioned Pytel v. Sunrun Inc., et al., Case No. CIV 538215, was filed in the Superior Court of California, County of San Mateo, against the Company, certain of the Company’s directors and officers, the underwriters of the Company’s initial public offering and other certain defendants. The complaint generally alleges that the defendants violated Sections 11, 12 and 15 of the Securities Act of 1933, as amended (the “Securities Act”), by making false or misleading statements in connection with the Company’s August 5, 2015 initial public offering regarding the continuation of net metering programs. The plaintiffs seek to represent a class of persons who acquired the Company’s common stock pursuant or traceable to the initial public offering. Plaintiffs seek compensatory damages, including interest, rescission or rescissory damages, an award of reasonable costs and attorneys’ fees, and any equitable or injunctive relief deemed appropriate by the court. On April 29, 2016, a purported shareholder class action captioned Baker et al. v. Sunrun Inc., et al., Case No. CIV 538419, was filed in the Superior Court of California, County of San Mateo. On May 10, 2016, a purported shareholder class action captioned Nunez v. Sunrun Inc., et al., Case No. CIV 538593, was filed in the Superior Court of California, County of San Mateo. The Pytel, Baker and Nunez complaints are substantially similar to the Pytel complaint, and seek similar relief against similar defendants on behalf of the same purported class. On
On April 21, 2016, a purported shareholder class action captioned *Cohen, et al. v. Sunrun Inc., et al.*, Case No. CIV 538304, was filed in the Superior Court of California, County of San Mateo, against the Company, certain of the Company's directors and officers, and the underwriters of the Company's initial public offering. The complaint generally alleges that the defendants violated Sections 11, 12 and 15 of the Securities Act by making false or misleading statements in connection with an August 5, 2015 initial public offering regarding the Company's business practices and its dependence on complex financial instruments. The *Cohen* plaintiffs seek to represent the same class and seek similar relief as the plaintiffs in the *Pytel, Cohen, Nunez,* and *Baker* actions. On September 26, 2016, the *Baker, Cohen, Nunez,* and *Pytel* actions were consolidated (such consolidated action referred to as the "state court litigation"). On December 27, 2017, the court granted Plaintiffs' motion for class certification.

Following a mediation on May 4, 2018, the parties entered into an agreement in principle to settle all claims asserted in the state court litigation against all defendants. The aggregate amount of the settlement is $32.0 million, $30.1 million of which will be funded by the Company's insurers and the remaining $1.9 million of which was accrued as of June 30, 2018. The Company and all defendants have denied, and continue to deny, the claims alleged in the state court litigation and the settlement does not reflect any admission of fault, wrongdoing or liability as to any defendant. On December 14, 2018, the court granted final approval of the settlement and entered judgment.

On May 3, 2017, a purported shareholder class action captioned *Fink, et al. v. Sunrun Inc., et al.*, Case No. 3:17-cv-02537, was filed in the United States District Court, Northern District of California, against the Company and certain of the Company's directors and officers. The complaint generally alleges that the defendants violated Sections 10(b) and 20(a) of the Securities Exchange Act of 1934, as amended (the "Exchange Act") and Securities and Exchange Commission Rule 10b-5, by making false or misleading statements in connection with public filings made between September 15, 2015 and March 8, 2017 regarding the number of customers who canceled contracts after signing up for the Company's home-solar energy system. The plaintiff seeks compensatory damages, including interest, attorney's fees, and costs, on behalf of all persons other than the defendants who purchased the Company's securities between September 16, 2015 and May 2, 2017. On May 4, 2017, a purported shareholder class action captioned *Hall, et al. v. Sunrun Inc., et al.*, Case No. 3:17-cv-02571, was filed in the United States District Court, Northern District of California. On May 18, 2017, a purported shareholder class action captioned *Sanogo, et al. v. Sunrun Inc., et al.*, Case No. 3:17-cv-02865, was filed in the United States District Court, Northern California District of California. The *Fink* and *Sanogo* complaints are substantially similar to the *Fink* complaint, and seeks similar relief against similar defendants on behalf of a substantially similar class. On August 23, 2017, the *Fink, Hall,* and *Sanogo* actions were consolidated, and on September 25, 2017, plaintiffs filed a consolidated amended complaint which alleges the same underlying violations as the original *Fink, Hall* and *Sanogo* complaints (such consolidated action referred to as the "federal court litigation"). On April 5, 2018, the court granted the Company's motion to dismiss without prejudice. Plaintiffs filed a second amended complaint on May 3, 2018. On July 19, 2018, the court again granted defendants' motion to dismiss without prejudice.

On August 8, 2018, the Company reached an agreement in principle with plaintiffs to settle all claims asserted in the federal court litigation against all defendants for $2.5 million, all of which will be funded by the Company's insurers. The Company and all defendants have denied, and continue to deny, the claims alleged in the federal court litigation and the settlement does not reflect any admission of fault, wrongdoing or liability as to any defendant. On November 20, 2018, the Court granted preliminary approval of the settlement. The settlement is subject to definitive documentation, shareholder notice and final court approval.

On June 29, 2017, a shareholder derivative complaint captioned *Barbara Sue Sklar Living Trust v. Sunrun Inc. et al.*, was filed in the United States District Court, Northern District of California, against the Company and certain of the Company's directors and officers. The complaint generally alleges that the defendants violated Section 14(a) of the Exchange Act by making false or misleading statements in connection with public filings, including proxy statements, made between September 10, 2015 and May 3, 2017 regarding the number of customers who cancelled contracts after signing up for the Company's home solar energy system. The Plaintiff seeks, among other things, damages in favor of the Company, certain corporate actions to purportedly improve the Company's corporate governance, and an award of costs and expenses to the putative plaintiff stockholder, including attorneys' fees.
On April 5, 2018, a stockholder derivative complaint captioned *Leonard Olsen v. Sunrun Inc. et al.*, was filed in the United States District Court, District of Delaware, against the Company and certain of the Company’s directors and officers. The Olsen complaint is substantially similar to the Sklar complaint, alleges that the defendants breached their fiduciary duties and violated Section 14(a) of the Exchange Act in connection with public statements made between September 16, 2015 and May 21, 2017 and seeks similar relief.

On January 28, 2019, the Company reached an agreement in principle to settle all claims asserted in the Sklar and Olsen derivative actions against all defendants. Under the terms of the proposed settlement, the Company agreed to adopt certain corporate governance measures in the future. The Company and all defendants have denied, and continue to deny, the claims alleged in the derivative actions and the settlement does not reflect any admission of fault, wrongdoing or liability as to any defendant. The settlement is subject to definitive documentation and court approval.

**Note 21. Net Income Per Share**

Basic net income per share is computed by dividing net income attributable to common stockholders by the weighted-average number of common shares outstanding during the period. Diluted net income per share is computed by dividing net income attributable to common stockholders by the weighted-average number of common shares outstanding during the period adjusted to include the effect of potentially dilutive securities. Potentially dilutive securities are excluded from the computation of dilutive EPS in periods in which the effect would be antidilutive.

The computation of the Company’s basic and diluted net income per share is as follows (in thousands, except per share amounts):

<table>
<thead>
<tr>
<th></th>
<th>Years Ended December 31,</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2018</td>
<td>2017</td>
<td>2016</td>
<td></td>
</tr>
<tr>
<td>Numerator:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Net income attributable to common stockholders</td>
<td>$26,657</td>
<td>$125,489</td>
<td>$75,129</td>
<td></td>
</tr>
<tr>
<td>Denominator:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Weighted average shares used to compute net income per share attributable to common stockholders, basic</td>
<td>110,089</td>
<td>105,432</td>
<td>102,367</td>
<td></td>
</tr>
<tr>
<td>Weighted average effect of potentially dilutive shares to purchase common stock</td>
<td>7,023</td>
<td>2,774</td>
<td>2,597</td>
<td></td>
</tr>
<tr>
<td>Weighted average shares used to compute net income per share attributable to common stockholders, diluted</td>
<td>117,112</td>
<td>108,206</td>
<td>104,964</td>
<td></td>
</tr>
<tr>
<td>Net income per share attributable to common stockholders</td>
<td>$0.24</td>
<td>$1.19</td>
<td>$0.73</td>
<td></td>
</tr>
<tr>
<td>Basic</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diluted</td>
<td></td>
<td>$0.23</td>
<td>$1.16</td>
<td>$0.72</td>
</tr>
</tbody>
</table>

The following shares were excluded from the computation of diluted net income per share as the impact of including those shares would be anti-dilutive (in thousands):

<table>
<thead>
<tr>
<th></th>
<th>Year Ended December 31,</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2018</td>
<td>2017</td>
<td>2016</td>
<td></td>
</tr>
<tr>
<td>Warrants</td>
<td>625</td>
<td>1,251</td>
<td>1,251</td>
<td></td>
</tr>
<tr>
<td>Outstanding stock options</td>
<td>3,271</td>
<td>13,803</td>
<td>8,981</td>
<td></td>
</tr>
<tr>
<td>Unvested restricted stock units</td>
<td>649</td>
<td>1,451</td>
<td>1,564</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>4,545</td>
<td>16,505</td>
<td>11,796</td>
</tr>
</tbody>
</table>

**Note 22. Related Party Transactions**

107
An individual who previously served as one of the Company’s directors until March 2017 has direct and indirect ownership interests in Enphase Energy, Inc. (“Enphase”). For the years ended December 31, 2017 and 2016, the Company recorded $9.1 million and $19.9 million, respectively, in purchases from Enphase and had outstanding payables to Enphase of $2.0 million as of December 31, 2017.

Note 23. Quarterly Results of Operations (Unaudited)

The following table presents selected quarterly results of operations data for the years ended December 31, 2018 and 2017 (in thousands, except per share amounts):

<table>
<thead>
<tr>
<th></th>
<th>December 31</th>
<th>September 30</th>
<th>June 30</th>
<th>March 31</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total Revenue</strong></td>
<td>$240,120</td>
<td>$204,960</td>
<td>$170,538</td>
<td>$144,363</td>
</tr>
<tr>
<td><strong>Cost of customer agreements and incentives</strong></td>
<td>$65,317</td>
<td>$63,195</td>
<td>$57,769</td>
<td>$54,576</td>
</tr>
<tr>
<td><strong>Cost of solar energy systems and product sales</strong></td>
<td>$89,040</td>
<td>$76,179</td>
<td>$64,268</td>
<td>$64,579</td>
</tr>
<tr>
<td><strong>Net loss</strong></td>
<td>$(49,515)</td>
<td>$(47,524)</td>
<td>$(71,727)</td>
<td>$(91,420)</td>
</tr>
<tr>
<td><strong>Net (loss) income attributable to common stockholders</strong></td>
<td>$(5,888)</td>
<td>$(2,896)</td>
<td>$7,409</td>
<td>28,032</td>
</tr>
<tr>
<td><strong>Net (loss) income per share attributable to common stockholders, basic</strong></td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td><strong>Net (loss) income per share attributable to common stockholders, diluted</strong></td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
</tbody>
</table>

**2018**

<table>
<thead>
<tr>
<th></th>
<th>December 31</th>
<th>September 30</th>
<th>June 30</th>
<th>March 31</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total Revenue</strong></td>
<td>$152,265</td>
<td>$144,546</td>
<td>$130,622</td>
<td>$105,109</td>
</tr>
<tr>
<td><strong>Cost of customer agreements and incentives</strong></td>
<td>$51,234</td>
<td>$47,299</td>
<td>$45,289</td>
<td>$42,613</td>
</tr>
<tr>
<td><strong>Cost of solar energy systems and product sales</strong></td>
<td>$74,174</td>
<td>$69,588</td>
<td>$60,938</td>
<td>$49,431</td>
</tr>
<tr>
<td><strong>Net loss</strong></td>
<td>$(56,035)</td>
<td>$(82,815)</td>
<td>$(73,610)</td>
<td>$(75,155)</td>
</tr>
<tr>
<td><strong>Net income attributable to common stockholders</strong></td>
<td>$69,254</td>
<td>$28,007</td>
<td>$18,346</td>
<td>$9,882</td>
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<tr>
<td><strong>Net income per share attributable to common stockholders, basic</strong></td>
<td>$0.65</td>
<td>$0.26</td>
<td>$0.17</td>
<td>$0.09</td>
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<tr>
<td><strong>Net income per share attributable to common stockholders, diluted</strong></td>
<td>$0.63</td>
<td>$0.26</td>
<td>$0.17</td>
<td>$0.09</td>
</tr>
</tbody>
</table>

In the second and third quarter of 2018, the Company reflected amounts received for ITCs from the investor in a pass-through financing obligation arrangement as proceeds from pass-through financing and other obligations in its consolidated statement of cash flows in the respective 2018 periods. The presentation of amounts received for ITCs from investors in pass-through financing obligation arrangements for the year ended December 31, 2018 are presented in cash from operating activities upon the adoption of Topic 606 in January 2018. Accordingly, $53.5 million and $103.0 million previously reported in cash provided by financing activities during the six months ended June 30, 2018 and nine months ended September 30, 2018 have been reclassed to net cash used in operating activities in the Company’s consolidated statement of cash flows for the year ended December 31, 2018.

Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure

None.
Item 9A. Controls and Procedures.

Evaluation of Disclosure Controls and Procedures

We carried out an evaluation, under the supervision and with the participation of our management, including our Chief Executive Officer and our Chief Financial Officer, of the effectiveness of our “disclosure controls and procedures” as of the end of the period covered by this Annual Report on Form 10-K, pursuant to Rules 13a-15(e) and 15d-15(e) under the Exchange Act.

In connection with that evaluation, our Chief Executive Officer and our Chief Financial Officer concluded that our disclosure controls and procedures were effective and designed to provide reasonable assurance that the information required to be disclosed is recorded, processed, summarized and reported within the time periods specified in the Securities and Exchange Commission rules and forms as of December 31, 2018. The term “disclosure controls and procedures,” as defined in Rules 13a-15I and 15d-15I under the Securities Exchange Act of 1934, as amended (the “Exchange Act”), means controls and other procedures of a company that are designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is recorded, processed, summarized and reported, within the time periods specified in the SEC’s rules and forms. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is accumulated and communicated to the company’s management, including its principal executive and principal financial officers, or persons performing similar functions, as appropriate to allow timely decisions regarding required disclosure. Management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving their objectives and management necessarily applies its judgment in evaluating the cost-benefit relationship of possible controls and procedures.

Changes in Internal Control over Financial Reporting

There was no change in our internal control over financial reporting identified in connection with the evaluation required by Rule 13a-15(d) and 15d-15(d) of the Exchange Act that occurred during the period covered by this Annual Report on Form 10-K that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

Management’s Report on Internal Control over Financial Reporting

Management is responsible for establishing and maintaining adequate internal control over financial reporting as defined in Rules 13a-15(f) and 15d-15(f) of the Exchange Act. Our management used the Committee of Sponsoring Organizations of the Treadway Commission Internal Control - Integrated Framework (2013), or the COSO framework, to evaluate the effectiveness of internal control over financial reporting. Management believes that the COSO framework is a suitable framework for its evaluation of financial reporting because it is free from bias, permits reasonably consistent qualitative and quantitative measurements of our internal control over financial reporting, is sufficiently complete so that those relevant factors that would alter a conclusion about the effectiveness of our internal control over financial reporting are not omitted and is relevant to an evaluation of internal control over financial reporting.

Management has assessed the effectiveness of our internal control over financial reporting as of December 31, 2018 and has concluded that such internal control over financial reporting is effective.

The effectiveness of our internal control over financial reporting as of December 31, 2018 has been audited by Ernst & Young LLP, an independent registered public accounting firm, as stated in its report which is included in Item 8 of this Annual Report on Form 10-K.

Item 9B. Other Information.

None.
PART III

Item 10. Directors, Executive Officers and Corporate Governance.

The information required by this Item 10 of Form 10-K will be set forth in our proxy statement to be filed with the SEC in connection with the solicitation of proxies for our 2019 Annual Meeting of Stockholders (“Proxy Statement”) and is incorporated herein by reference. The Proxy Statement will be filed with the SEC within 120 days after the year-end of the fiscal year which this report relates.

Item 11. Executive Compensation.

The information required by this Item 11 will be set forth in the Proxy Statement and is incorporated herein by reference.


The information required by this Item 12 will be set forth in the Proxy Statement and is incorporated herein by reference.

Item 13. Certain Relationships and Related Transactions, and Director Independence.

The information required by this Item 13 will be set forth in the Proxy Statement and is incorporated herein by reference.

Item 14. Principal Accounting Fees and Services.

The information required by this Item 14 will be set forth in the Proxy Statement and is incorporated herein by reference.

Documents filed as part of this report are as follows:

(1) Consolidated Financial Statements

Our Consolidated Financial Statements are listed in the "Index to Consolidated Financial Statements" under Item 8 of Part II of this Annual Report.

(2) Financial Statement Schedules

The required information is included elsewhere in this Annual Report, not applicable, or not material.

(3) Exhibits

The exhibits listed in the accompanying "Exhibit Index" are filed or incorporated by reference as part of this Annual Report.
## EXHIBIT INDEX

<table>
<thead>
<tr>
<th>Exhibit Number</th>
<th>Exhibit Description</th>
<th>Form</th>
<th>File No.</th>
<th>Exhibit Number</th>
<th>Filing Date</th>
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<tr>
<td>3.1</td>
<td>Amended and Restated Certificate of Incorporation of the Registrant</td>
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<td>333-205217</td>
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<td>6/25/2015</td>
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<td>Form of Warrant</td>
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<td>Tenth Amended and Restated Investors’ Rights Agreement among the Registrant and certain holders of its capital stock, dated as of March 31, 2015</td>
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<td>Shareholders Agreement among the Registrant and certain holders of its capital stock, dated as of April 1, 2015</td>
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<td>Warrant to Purchase Shares of Common Stock of Sunrun Inc.</td>
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<td>8/24/2017</td>
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<td>Registration Rights Agreement between the Company and Comcast Corporation, dated August 23, 2017</td>
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<td>Form of Indenture, between the Registrant and one or more trustees to be named</td>
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<td>333-222099</td>
<td>4.8</td>
<td>12/15/2017</td>
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<td>4.9</td>
<td>Form of Common Stock Warrant Agreement and Warrant Certificate</td>
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<td>333-222099</td>
<td>4.9</td>
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<td>4.10</td>
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<td>4.11</td>
<td>Form of Debt Securities Warrant Agreement and Warrant Certificate</td>
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<td>Form of Indemnification Agreement between the Registrant and each of its directors and executive officers</td>
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<td>Employment Letter between the Registrant and Lynn Jurich, dated as of May 8, 2015</td>
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<td>Employment Letter between the Registrant and Edward Fenster, dated as of May 8, 2015</td>
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<td>Credit Agreement among the Registrant, Credit Suisse Securities (USA) LLC and the other parties thereto, dated as of April 1, 2015</td>
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<td>333-205217</td>
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<td>Amended and Restated Credit Agreement among Sunrun Hera Portfolio 2015-A, LLC, Investec Bank PLC (as Administrative Agent), Investec Bank PLC (as Issuing Bank) and the Lenders from time to time as party thereto, dated January 15, 2016 and amended and restated as of June 23, 2017</td>
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<td>12/29/2017</td>
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<td>10.18¥</td>
<td>Amendment No. 2 to Credit Agreement among the Company, AEE Solar, Inc., Sunrun South LLC, Sunrun Installation Services Inc., Clean Energy Experts, LLC, each of the additional lenders identified on the signature pages thereto, Credit Suisse AG and Silicon Valley Bank, dated as of June 15, 2016</td>
<td>10-Q</td>
<td>001-37511</td>
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<td>8/11/2016</td>
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<td>10.20¥</td>
<td>First Amendment to Credit Agreement and Collateral Agency Agreement among Sunrun Hera Portfolio 2015-A, LLC, Investec Bank PLC (as administrative agent, issuing bank and as lender), each of the additional lenders identified on the signature pages thereto and Deutsche Bank Trust Company Americas, dated as of May 12, 2016</td>
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<td>10.21¥</td>
<td>Consent and Second Amendment to Credit Agreement among Sunrun Hera Portfolio 2015-A, LLC, Investec Bank PLC (as administrative agent, issuing bank and as lender) and each of the additional lenders identified on the signature pages thereto, dated as of June 29, 2016</td>
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<td>10.22¥</td>
<td>Amendment No. 3 to Credit Agreement among the Company, AEE Solar, Inc., Sunrun South LLC, Sunrun Installation Services Inc., Clean Energy Experts, LLC, each of the lenders identified on the signature pages thereto, Credit Suisse AG and Silicon Valley Bank, dated as of December 2, 2016</td>
<td>10-K</td>
<td>001-37511</td>
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<td>8/11/2016</td>
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<td>10.23¥</td>
<td>Consent and Third Amendment to Credit Agreement and First Amendment to Cash Diversion and Commitment Fee Guaranty among the Company, Sunrun Hera Portfolio 2015-A, LLC, Investec Bank Plc (as administrative agent, issuing bank and as lender) and each of the additional lenders identified on the signature pages thereto, dated as of November 30, 2016</td>
<td>10-K</td>
<td>001-37511</td>
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<td>8/11/2016</td>
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<td>10.24¥</td>
<td>Consent and Fourth Amendment to Credit Agreement and First Amendment to Guaranty and Security Agreement among Sunrun Hera Portfolio 2015-A, LLC, Sunrun [<em>] Manager [</em>], LLC, Sunrun [<em>] Manager [</em>], LLC, Sunrun [<em>] Manager [</em>], LLC, Sunrun [<em>] Manager [</em>], LLC, Sunrun [<em>] Manager [</em>], LLC, Sunrun [<em>] Manager [</em>], LLC, Sunrun [<em>] Manager [</em>], LLC, Investec Bank Plc (as administrative agent, issuing bank and as lender), Deutsche Bank Trust Company Americas, and each of the additional lenders identified on the signature pages thereto, dated as of January 31, 2017</td>
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<td>10.25¥</td>
<td>Credit Agreement among Sunrun Neptune Portfolio 2016-A, LLC, as Borrower, Suntrust Bank as Administrative Agent, ING Capital LLC as LC Issuer, and The Lenders from Time to Time Party Hereto dated as of May 9, 2017 and Exhibits</td>
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<td>Consent and First Amendment to Amended and Restated Credit Agreement and First Amendment to Amended and Restated Cash Diversion and Commitment Fee Guaranty, dated as of December 28, 2017</td>
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<td>Credit Agreement among Sunrun Scorpio Portfolio 2017-A, LLC, as Borrower, Keybank National Association, as Administrative Agent, Keybank National Association, as LC Issuer, and The Lenders from Time to Time Party Hereto dated as of October 20, 2017 and Exhibits</td>
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<td>Separation and Consulting Agreement between Mina Kim and Sunrun Inc., dated as of April 4, 2018</td>
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<td>Amendment to Separation and Consulting Agreement between Mina Kim and Sunrun Inc., dated as of June 15, 2018</td>
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<td>10.30¥</td>
<td>Amendment No. 5 to Credit Agreement among the Company, AEE Solar, Inc., Sunrun South LLC, Sunrun Installation Services Inc., Clean Energy Experts, LLC, each of the lenders identified on the signature pages thereto, Credit Suisse AG, Cayman Islands Branch and Silicon Valley Bank, dated as of February 23, 2018</td>
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<td>5/9/2018</td>
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<tr>
<td>10.31¥</td>
<td>Second Amended and Restated Credit Agreement among Sunrun Hera Portfolio 2015-A, LLC, Investec Bank PLC (as administrative agent, issuing bank and as lender), and each of the additional lenders identified on the signature pages thereto, dated January 15, 2016, amended and restated as of June 23, 2017 and further amended and restated as of March 27, 2018</td>
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<td>001-37511</td>
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<td>First Amendment to Credit Agreement among the Company, Sunrun Neptune Portfolio 2016-A, LLC, SunTrust Bank (as administrative agent and as lender), ING Capital LLC (as issuer and as lender), and each of the additional Lenders from time to time party thereto, dated as of March 26, 2018</td>
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<td>Consent and First Amendment to Second Amended and Restated Credit Agreement and Third Amendment to Amended and Restated Cash Diversion and Commitment Fee Guaranty dated as of July 18, 2018, among Sunrun Hera Portfolio 2015-A, Sunrun Inc., Investec Bank Plc (as administrative agent, issuing bank and as lender), and each of the additional lenders identified on the signature pages thereto</td>
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114
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<td>Fourth Amendment to Second Amended and Restated Credit Agreement among Sunrun Hera Portfolio 2015-A, LLC, Investec Bank Plc (as administrative agent and issuing bank), and each of the additional Lenders identified on the signature pages thereto, dated as of November 30, 2018</td>
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<td>Amendment No. 6 to Credit Agreement among the Company, AEE Solar, Inc., Sunrun South LLC, Sunrun Installation Services Inc., Clean Energy Experts, LLC, each of the lenders identified on the signature pages thereto, Credit Suisse AG, Cayman Islands Branch, dated as of November 14, 2018</td>
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<td>Consent of Independent Registered Public Accounting Firm</td>
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<td>31.1</td>
<td>Certification of Chief Executive Officer pursuant to Exchange Act Rules 13a-14(a) and 15d-14(a), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002</td>
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<td>Certification of Chief Financial Officer pursuant to Exchange Act Rules 13a-14(a) and 15d-14(a), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002</td>
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<td>32.1†</td>
<td>Certifications of Chief Executive Officer and Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002</td>
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</table>

† The certifications attached as Exhibit 32.1 that accompany this Annual Report on Form 10-K, are deemed furnished and not filed with the Securities and Exchange Commission and are not to be incorporated by reference into any filing of Sunrun Inc. under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended, whether made before or after the date of this Annual Report on Form 10-K, irrespective of any general incorporation language contained in such filing.

+ Indicates management contract or compensatory plan.

¥ Confidential treatment has been requested as to certain portions of this exhibit, which portions have been omitted and submitted separately to the Securities and Exchange Commission.
SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, as amended, the Registrant has duly caused this Report to be signed on its behalf by the undersigned, thereunto duly authorized.

Sunrun Inc.

Date: February 28, 2019

By: /s/ Lynn Jurich

Lynn Jurich
Chief Executive Officer and Director

Pursuant to the requirements of the Securities Exchange Act of 1934, as amended, this Report has been signed below by the following persons on behalf of the Registrant in the capacities and on the dates indicated.

<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>/s/ Lynn Jurich</td>
<td>Chief Executive Officer and Director (Principal Executive Officer)</td>
<td>February 28, 2019</td>
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<tr>
<td>Lynn Jurich</td>
<td></td>
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<tr>
<td>/s/ Robert Komin</td>
<td>Chief Financial Officer (Principal Accounting and Financial Officer)</td>
<td>February 28, 2019</td>
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<td>Robert Komin</td>
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<tr>
<td>/s/ Edward Fenster</td>
<td>Chairman and Director</td>
<td>February 28, 2019</td>
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<td>Edward Fenster</td>
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<tr>
<td>/s/ Katherine August-deWilde</td>
<td>Director</td>
<td>February 28, 2019</td>
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<tr>
<td>Katherine August-deWilde</td>
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<tr>
<td>/s/ Leslie Dach</td>
<td>Director</td>
<td>February 28, 2019</td>
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<td>Leslie Dach</td>
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<tr>
<td>/s/ Alan Ferber</td>
<td>Director</td>
<td>February 28, 2019</td>
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<td>Alan Ferber</td>
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<tr>
<td>/s/ Mary Powell</td>
<td>Director</td>
<td>February 28, 2019</td>
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<td>Mary Powell</td>
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<tr>
<td>/s/ Gerald Risk</td>
<td>Director</td>
<td>February 28, 2019</td>
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<td>Gerald Risk</td>
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<tr>
<td>/s/ Steve Vassallo</td>
<td>Director</td>
<td>February 28, 2019</td>
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<td>Steve Vassallo</td>
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</tbody>
</table>
SUNRUN ATHENA ISSUER 2018-1, LLC

ISSUER

and

WELLS FARGO BANK, NATIONAL ASSOCIATION

INDENTURE TRUSTEE

INDENTURE

DATED AS OF DECEMBER 20, 2018

$378,500,000

SUNRUN ATHENA ISSUER 2018-1, LLC
SOLAR ASSET BACKED NOTES, SERIES 2018-1
CLASS A NOTES AND CLASS B NOTES
# Table of Contents

## ARTICLE I Definitions

<table>
<thead>
<tr>
<th>Section</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.01.</td>
<td>General Definitions and Rules of Construction</td>
<td>2</td>
</tr>
<tr>
<td>1.02.</td>
<td>Calculations</td>
<td>2</td>
</tr>
</tbody>
</table>

## ARTICLE II The Notes; Reconveyance

<table>
<thead>
<tr>
<th>Section</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.01.</td>
<td>General</td>
<td>2</td>
</tr>
<tr>
<td>2.02.</td>
<td>Forms of Notes</td>
<td>3</td>
</tr>
<tr>
<td>2.03.</td>
<td>Payment of Principal and Interest</td>
<td>6</td>
</tr>
<tr>
<td>2.04.</td>
<td>Payments to Noteholders</td>
<td>6</td>
</tr>
<tr>
<td>2.05.</td>
<td>Execution, Authentication, Delivery and Dating</td>
<td>6</td>
</tr>
<tr>
<td>2.06.</td>
<td>Temporary Notes</td>
<td>7</td>
</tr>
<tr>
<td>2.07.</td>
<td>Registration, Registration of Transfer and Exchange</td>
<td>7</td>
</tr>
<tr>
<td>2.08.</td>
<td>Transfer and Exchange</td>
<td>12</td>
</tr>
<tr>
<td>2.09.</td>
<td>Mutilated, Destroyed, Lost or Stolen Notes</td>
<td>17</td>
</tr>
<tr>
<td>2.10.</td>
<td>Persons Deemed Noteholders</td>
<td>17</td>
</tr>
<tr>
<td>2.11.</td>
<td>Cancellation of Notes</td>
<td>18</td>
</tr>
<tr>
<td>2.12.</td>
<td>Conditions to Closing</td>
<td>18</td>
</tr>
<tr>
<td>2.13.</td>
<td>Definitive Notes</td>
<td>21</td>
</tr>
</tbody>
</table>

## ARTICLE III Covenants; Collateral; Representations; Warranties

<table>
<thead>
<tr>
<th>Section</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.01.</td>
<td>Performance of Obligations</td>
<td>22</td>
</tr>
<tr>
<td>3.02.</td>
<td>Negative Covenants</td>
<td>23</td>
</tr>
<tr>
<td>3.03.</td>
<td>Money for Note Payments</td>
<td>24</td>
</tr>
<tr>
<td>3.04.</td>
<td>Restriction of Issuer Activities</td>
<td>25</td>
</tr>
<tr>
<td>3.05.</td>
<td>Protection of Trust Estate</td>
<td>25</td>
</tr>
<tr>
<td>3.06.</td>
<td>Opinions and Officer's Certificates as to Trust Estate</td>
<td>27</td>
</tr>
</tbody>
</table>
Section 3.07. Statement as to Compliance 28

Section 3.08. Recording 28

Section 3.09. Agreements Not to Institute Bankruptcy Proceedings 29

Section 3.10. Additional Covenants; Covenants with Respect to the Managing Members and Project Companies 29

Section 3.11. Providing of Notice 33

Section 3.12. Representations and Warranties of the Issuer 34

Section 3.13. Representations and Warranties of the Indenture Trustee 40

Section 3.14. Rule 144A Information

Section 3.15. Knowledge 41

ARTICLE IV Management, Administration and Servicing 41

Section 4.01. Transaction Management Agreement 41

[**] = Certain confidential information contained in this document, marked by brackets, is filed with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.
ARTICLE V Accounts, Collections, Payments of Interest and Principal, Releases, and Statements to Noteholders

Section 5.01. Accounts

Section 5.02. Supplemental Reserve Account and Tax Loss Insurance Proceeds Account

Section 5.03. Liquidity Reserve Account

Section 5.04. Collection Account

Section 5.05. Distribution of Funds in the Collection Account

Section 5.06. Early Amortization Period Payments and Sequential Interest Amortization Period Payments

Section 5.07. Note Payments

Section 5.08. Statements to Noteholders; Tax Returns

Section 5.09. Reports by Indenture Trustee

Section 5.10. Final Balances

ARTICLE VI Voluntary Prepayment of Notes, Optional Redemption of the Notes and Release of Collateral

Section 6.01. Voluntary Prepayment

Section 6.02. Optional Redemption

Section 6.03. Notice of Voluntary Prepayment; Notice of Redemption

Section 6.04. Cancellation of Notes

Section 6.05. Release of Collateral

ARTICLE VII The Indenture Trustee

Section 7.01. Duties of Indenture Trustee

Section 7.02. Notice of Default, Transaction Manager Termination Event or Event of Default; Delivery of Manager Reports

Section 7.03. Rights of Indenture Trustee

Section 7.04. Not Responsible for Recitals, Issuance of Notes or Application of Moneys as Directed

Section 7.05. May Hold Notes

Section 7.06. Money Held in Trust

Section 7.07. Compensation and Reimbursement

Section 7.08. Eligibility; Disqualification
<table>
<thead>
<tr>
<th>Section</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>7.09.</td>
<td>Indenture Trustee's Capital and Surplus</td>
<td>64</td>
</tr>
<tr>
<td>7.10.</td>
<td>Resignation and Removal; Appointment of Successor</td>
<td>64</td>
</tr>
<tr>
<td>7.11.</td>
<td>Acceptance of Appointment by Successor</td>
<td>65</td>
</tr>
<tr>
<td>7.12.</td>
<td>Merger, Conversion, Consolidation or Succession to Business of Indenture Trustee</td>
<td>65</td>
</tr>
<tr>
<td>7.13.</td>
<td>Co-trustees and Separate Indenture Trustees</td>
<td>66</td>
</tr>
<tr>
<td>7.15.</td>
<td>Control</td>
<td>67</td>
</tr>
<tr>
<td>7.16.</td>
<td>Suits for Enforcement</td>
<td>68</td>
</tr>
<tr>
<td>7.17.</td>
<td>Compliance with Applicable Anti-Terrorism and Anti-Money Laundering Regulations</td>
<td>68</td>
</tr>
</tbody>
</table>

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ARTICLE VIII [Reserved]

ARTICLE IX Event of Default

Section 9.01. Events of Default
Section 9.02. Actions of Indenture Trustee
Section 9.03. Indenture Trustee May File Proofs of Claim
Section 9.04. Indenture Trustee May Enforce Claim Without Possession of Notes
Section 9.05. Knowledge of Indenture Trustee
Section 9.06. Limitation on Suits
Section 9.07. Unconditional Right of Noteholders to Receive Principal and Interest
Section 9.08. Restoration of Rights and Remedies
Section 9.09. Rights and Remedies Cumulative
Section 9.10. Delay or Omission; Not Waiver
Section 9.11. Control by Noteholders
Section 9.12. Waiver of Certain Events by Less Than All Noteholders
Section 9.13. Undertaking for Costs
Section 9.14. Waiver of Stay or Extension Laws
Section 9.15. Sale of Trust Estate
Section 9.16. Action on Notes

ARTICLE X Supplemental Indentures

Section 10.01. Supplemental Indentures Without Noteholder Approval
Section 10.02. Supplemental Indentures with Consent of Noteholders
Section 10.03. Execution of Amendments and Supplemental Indentures
Section 10.04. Effect of Amendments and Supplemental Indentures
Section 10.05. Reference in Notes to Amendments and Supplemental Indentures
Section 10.06. Indenture Trustee to Act on Instructions

ARTICLE XI [Reserved]

ARTICLE XII Miscellaneous
Section 12.13. Legal Holidays 85
Section 12.14. Governing Law; Jurisdiction; Waiver of Jury Trial 85
Section 12.15. Counterparts 86
Section 12.16. Recording of Indenture 86
Section 12.17. Further Assurances 86
Section 12.18. No Bankruptcy Petition Against the Issuer 86
Section 12.19. [Reserved] 86
Section 12.20. Liquidated Damages Demands 86
Section 12.21. [Reserved] 86
Section 12.22. Tax Treatment Disclosure 87
Section 12.23. Multiple Roles 87
Section 12.24. PATRIOT Act 87

ARTICLE XIII Termination 87

Section 13.01. Termination of Indenture 87

SCHEDULE I — Schedule of Solar Assets
SCHEDULE II — Scheduled Host Customer Payments
SCHEDULE III — Scheduled PBI Payments
SCHEDULE IV — Scheduled Outstanding Note Balance
SCHEDULE V — Projected Tax Equity Investor Distributions

EXHIBIT A-1 — Form of Class A Note A-1
EXHIBIT A-2 — Form of Class B Note A-2
EXHIBIT B-1 — Forms of Transferee Letter B-1
EXHIBIT B-2 — Form of Transfer Certificate for Exchange or Transfer from Regulation S Global Note to Rule 144A Global Note B-2
EXHIBIT B-3 — Form of Transfer Certificate for Transfer from Definitive Note to Definitive Note B-3
EXHIBIT C-1 — Notice of Voluntary Prepayment C-1
[***] = Certain confidential information contained in this document, marked by brackets, is filed with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.
THIS INDENTURE (as amended or supplemented from time to time, the “Indenture”) is dated as of December 20, 2018 between Sunrun Athena Issuer 2018-1, LLC, a limited liability company organized under the laws of the State of Delaware, as issuer (the “Issuer”), and Wells Fargo Bank, National Association, a national banking association, not in its individual capacity but solely in its capacity as indenture trustee (together with its successors and assigns in such capacity, the “Indenture Trustee”).

PRELIMINARY STATEMENT

Pursuant to this Indenture, there is hereby duly authorized the execution and delivery of two classes of notes designated as the Issuer’s 5.31% Solar Asset Backed Notes, Series 2018-1, Class A (the “Class A Notes”), 7.50% Solar Asset Backed Notes, Series 2018-1, Class B (the “Class B Notes” and together with the Class A Notes, the “Notes”). All covenants and agreements made by the Issuer herein are for the benefit and security of the Holders of the Notes. The Issuer is entering into this Indenture, and the Indenture Trustee is accepting the trusts created hereby, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged.

GRANTING CLAUSE

The Issuer hereby Grants to the Indenture Trustee, for the benefit of the Holders of the Notes, as their interests may appear, all of the rights, title, interest and benefits of the Issuer whether now existing or hereafter arising in and to: (a) the Managing Member Membership Interests; (b) the Contribution Agreements, the Transaction Management Agreement, the Manager Transition Agreement, the Custodial Agreement, the Performance Guaranty, any Letter of Credit and all other Transaction Documents; (c) amounts deposited from time to time into the Collection Account, the Liquidity Reserve Account, the Supplemental Reserve Account, the Tax Loss Insurance Proceeds Account, and all Eligible Investments in each such account; (d) the membership interests of each Tax Equity Investor Member in the related Project Company if and when acquired by the Issuer through exercise of the related Purchase Option or the Withdrawal Option; (e) the membership interests of each Managing Member in the related Project Company; (f) proceeds of any and all of the foregoing including all proceeds of the conversion, voluntary or involuntary, of any of the foregoing into cash or other property; and (g) all other assets of the Issuer (collectively, the “Trust Estate”) except that the Trust Estate will not include a lien on the Solar Assets or any other assets of the Project Companies.

Such Grants are made in trust, to secure payments of amounts due with respect to the Notes ratably and without prejudice, priority or distinction between the Notes, and to secure: (a) the payment of all amounts on the Notes as such amounts become due in accordance with their terms; (b) the payment of all other sums payable in accordance with the provisions of this Indenture; and (c) compliance with the provisions of this Indenture, all as provided in this Indenture.

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The Indenture Trustee acknowledges such Grants, accepts the trusts hereunder in accordance with the provisions of this Indenture, and agrees to perform the duties herein required pursuant to the terms and provisions of this Indenture and subject to the conditions hereof.

ARTICLE I
DEFINITIONS

Section 1.01. General Definitions and Rules of Construction. Except as otherwise specified or as the context may otherwise require, capitalized terms used in this Indenture shall have the respective meanings given to such terms in the Standard Definitions attached hereto as Annex A, which is hereby incorporated by reference into this Indenture as if set forth fully in this Indenture. The rules of construction set forth in Annex A shall apply to this Indenture and are hereby incorporated by reference into this Indenture as if set forth fully in this Indenture.

Section 1.02. Calculations. Calculations required to be made pursuant to this Indenture shall be made on the basis of information or accountings as to payments on each Note furnished by the Transaction Manager. Except to the extent they are incorrect on their face, such information or accountings may be conclusively relied upon in making such calculations, but to the extent that it is later determined that any such information or accountings are incorrect, appropriate corrections or adjustments will be made.

ARTICLE II
THE NOTES; RECONVEYANCE

Section 2.01. General.

(a) The Notes shall be designated the Issuer’s “5.31% Solar Asset Backed Notes, Series 2018-1, Class A” and “7.50% Solar Asset Backed Notes, Series 2018-1, Class B.”

(b) All payments of principal and interest with respect to the Notes shall be made only from the Trust Estate on the terms and conditions specified herein. Each Noteholder and each Note Owner, by its acceptance of a Note, agrees that it will have recourse solely against such Trust Estate and such payment and indemnification obligations included therein.

(c) Except as otherwise provided herein, all Notes shall be substantially identical in all respects. Except as specifically provided herein, all Notes issued, authenticated and delivered under this Indenture shall be in all respects equally and ratably entitled to the benefits hereof without preference, priority or distinction on account of the actual time or times of authentication and delivery, all in accordance with the terms and provisions of this Indenture.

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(d) The Initial Outstanding Note Balance of the Class A Notes and the Class B Notes that may be executed by the Issuer and authenticated and delivered by the Indenture Trustee and Outstanding at any given time under this Indenture is limited to $322,000,000 and $56,500,000, respectively.

(e) Holders of the Notes shall be entitled to payments of interest and principal as provided herein. Each Class of Notes shall have a final maturity on the Rated Final Maturity. All Notes of the same Class shall be secured on parity with one another, with no Note of any Class having any priority over any other Note of that same Class.

(f) The Notes that are authenticated and delivered to the Noteholders by the Indenture Trustee upon an Issuer Order on the Closing Date shall be dated as of the Closing Date. Any Note issued later in exchange for, or in replacement of, any Note issued on the Closing Date shall be dated the date of its authentication.

(g) The Notes are issuable in the applicable Minimum Denomination and, in each case, integral multiples of $1,000 in excess thereof; provided that one Note of such Class may be issued in an additional amount equal to any remaining portion of the Initial Outstanding Note Balance of such Class.

Section 2.02. Forms of Notes. The Notes shall be in substantially the form set forth in Exhibit A-1 or Exhibit A-2, as applicable, with such appropriate insertions, omissions, substitutions and other variations as are required or permitted by this Indenture, and may have such letters, numbers or other marks of identification and such legends or endorsements placed thereon as may, consistently herewith, be determined by the Issuer, as evidenced by its execution thereof.

The Definitive Notes shall be typewritten, printed, lithographed or engraved or produced by any combination of these methods, all as determined by the officers executing such Notes, as evidenced by their execution of such Notes.

Each Note shall be dated the date of its authentication. The terms of the Notes are set forth in Exhibit A-1 or Exhibit A-2, and are part of the terms of this Indenture.

(a) Global Notes. The Notes are being offered and sold by the Issuer to the Initial Purchasers pursuant to the Note Purchase Agreement.

Notes offered and sold within the United States to QIBs in reliance on Rule 144A and, with respect to any Class B Notes acquired by Sunrun or any of its affiliates, Institutional Accredited Investors, shall be issued initially in the form of Rule 144A Global Notes, which shall be deposited on behalf of the purchasers of the Notes represented thereby with the Indenture Trustee, as custodian for the Securities Depository, and registered in the name of the Securities Depository or a nominee of the Securities Depository, duly executed by the Issuer and authenticated by the Indenture Trustee.

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as hereinafter provided. The Outstanding Note Balance of the Rule 144A Global Notes may from time to time be increased or decreased by adjustments made on the records of the Indenture Trustee and the Securities Depository or its nominee as hereinafter provided. The Indenture Trustee shall not be liable for any error or omission by the Securities Depository in making such record adjustments and the records of the Indenture Trustee shall be controlling with regard to outstanding principal amount of Notes hereunder.

Notes offered and sold outside of the United States in reliance on Regulation S under the Securities Act shall be issued initially in the form of a Regulation S Temporary Global Note, which shall be deposited on behalf of the purchasers of the Notes represented thereby with the Indenture Trustee, as custodian for the Securities Depository, and registered in the name of the Securities Depository or the nominee of the Securities Depository for the investors’ respective accounts at Euroclear Bank S.A./N.V. as operator of the Euroclear System (“Euroclear”), or Clearstream Banking société anonyme (“Clearstream”), duly executed by the Issuer and authenticated by the Indenture Trustee as hereinafter provided. Beneficial interests in the Regulation S Temporary Global Notes may be held only through Euroclear or Clearstream.

Within a reasonable period of time following the expiration of the “40-day distribution compliance period” (as defined in Regulation S), beneficial interests in the Regulation S Temporary Global Note shall be exchanged for beneficial interests in Regulation S Permanent Global Notes upon the receipt by the Indenture Trustee of an Officer’s Certificate from the Issuer. The Regulation S Permanent Global Notes will be deposited with the Indenture Trustee, as custodian, and registered in the name of a nominee of the Securities Depository. Simultaneously with the authentication of the Regulation S Permanent Global Notes, the Indenture Trustee shall cancel the Regulation S Temporary Global Note. The Outstanding Note Balance of the Regulation S Temporary Global Note and the Regulation S Permanent Global Notes may from time to time be increased or decreased by adjustments made on the records of the Indenture Trustee and the Securities Depository or its nominee, as the case may be, in connection with transfers of interest as hereinafter provided. The Indenture Trustee shall incur no liability for any error or omission of the Securities Depository in making such record adjustments and the records of the Indenture Trustee shall be controlling with regard to outstanding principal amount of Regulation S Global Notes hereunder.

Each Global Note shall represent such of the outstanding Notes as shall be specified therein and each shall provide that it shall represent the aggregate amount of outstanding Notes from time to time endorsed thereon and that the aggregate amount of outstanding Notes represented thereby may from time to time be reduced or increased, as appropriate, to reflect exchanges and prepayments. Any endorsement of a Global Note to reflect the amount of any increase or decrease in the amount of outstanding Notes represented thereby shall be made by the Indenture Trustee, or by the Note Registrar at the direction of the Indenture Trustee, in accordance with instructions given by the Holder thereof as required by Section 2.08.

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The provisions of the “Operating Procedures of the Euroclear System” and “Terms and Conditions Governing Use of Euroclear” and the “Management Regulations” and “Instructions to Participants” of Clearstream shall be applicable to interests in the Regulation S Temporary Global Note and the Regulation S Permanent Global Notes that are held by the members of, or participants in, the Securities Depository (“Agent Members”) through Euroclear or Clearstream.

Except as set forth in Section 2.08, the Global Notes may be transferred, in whole and not in part, only to another nominee of the Securities Depository or to a successor of the Securities Depository or its nominee.

(b) *Book-Entry Provisions.* This Section 2.02(b) shall apply only to the Global Notes deposited with or on behalf of the Securities Depository.

The Issuer shall execute and the Indenture Trustee shall, in accordance with this Section 2.02(b), authenticate and deliver one Global Note for each Class of Notes which (i) shall be registered in the name of the Securities Depository or the nominee of the Securities Depository and (ii) shall be delivered by the Indenture Trustee to the Securities Depository or pursuant to the Securities Depository’s instructions or held by the Indenture Trustee as custodian for the Securities Depository.

Agent Members shall have no rights either under this Indenture with respect to any Global Note held on their behalf by the Securities Depository or by the Indenture Trustee as custodian for the Securities Depository or under such Global Note, and the Securities Depository may be treated by the Issuer, the Indenture Trustee and any agent of the Issuer or the Indenture Trustee as the absolute owner of such Global Note for all purposes whatsoever. Notwithstanding the foregoing, nothing herein shall prevent the Issuer, the Indenture Trustee or any agent of the Issuer or the Indenture Trustee from giving effect to any written certification, proxy or other authorization furnished by the Securities Depository or impair, as between the Securities Depository and its Agent Members, the operation of customary practices of such Securities Depository governing the exercise of the rights of an owner of a beneficial interest in any Global Note.

The Note Registrar and the Indenture Trustee shall be entitled to treat the Securities Depository for all purposes of this Indenture (including the payment of principal of and interest on the Notes and the giving of instructions or directions hereunder) as the sole Holder of the Notes, and shall have no obligation to the Note Owners.

The rights of Note Owners shall be exercised only through the Securities Depository and shall be limited to those established by law and agreements between such Note Owners and the Securities Depository and/or the Agent Members pursuant to the Note Depository Agreement. The initial Securities Depository will make book-entry transfers among the Agent Members and receive

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and transmit payments of principal of and interest on the Notes to such Agent Members with respect to such Global Notes.

Whenever this Indenture requires or permits actions to be taken based upon instructions or directions of Holders of Notes evidencing a specified percentage of the Outstanding amount of the Notes, the Securities Depository shall be deemed to represent such percentage only to the extent that it has received instructions to such effect from Note Owners and/or Agent Members owning or representing, respectively, such required percentage of the beneficial interest in the Notes and has delivered such instructions to the Indenture Trustee.

(c) Definitive Notes. Except as provided in Sections 2.08 and 2.13, owners of beneficial interests in Global Notes will not be entitled to receive physical delivery of certificated definitive, fully registered Notes (the “Definitive Notes”).

Section 2.03. Payment of Principal and Interest.

(a) Principal payments on the Notes will be made on each Payment Date to the Noteholders as of the related Record Date pursuant to the provision of Section 5.05. The remaining Aggregate Outstanding Note Balance, if any, shall be due and payable on the Rated Final Maturity.

(b) On each Payment Date, the Note Interest for each Class of Notes will be distributed to the registered Noteholders of the applicable Class of Notes as of the related Record Date in accordance with the Priority of Payments. Interest on the Notes with respect to any Payment Date will accrue at the applicable Note Rate based on the Interest Accrual Period.

Section 2.04. Payments to Noteholders.

(a) Noteholders of each Class shall, subject to the priorities and conditions set forth in Section 5.05, be entitled to receive payments of interest and principal on each Payment Date. Any payment of interest or principal payable with respect to the Notes on the applicable Payment Date shall be made to the Person in whose name such Note is registered on the Record Date for such Payment Date in the manner provided in Section 5.07.

(b) All reductions in the principal balance of a Note (or one or more Predecessor Notes) effected by payments of principal made on any Payment Date shall be binding upon all Holders of such Note and of any Note issued upon the registration of transfer thereof or in exchange therefor or in lieu thereof, whether or not such payment is noted on such Note.

Section 2.05. Execution, Authentication, Delivery and Dating.

(a) The Notes shall be executed by the Issuer. The signature of such Authorized Officer on the Notes may be manual or facsimile. Notes bearing the manual or facsimile signature of any individual who was, at the time of execution thereof, an Authorized Officer of the Issuer shall bind

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the Issuer, notwithstanding the fact that such individual ceased to hold such office prior to the authentication and delivery of such Notes or did not hold such office at the date of issuance of such Notes.

(b) On the Closing Date, the Issuer shall, and at any time and from time to time after the execution and delivery of this Indenture, the Issuer may deliver Notes executed by the Issuer to the Indenture Trustee for authentication, and the Indenture Trustee, upon receipt of the Notes and of an Issuer Order, shall authenticate and deliver such Notes; provided, however, that the Indenture Trustee shall not authenticate the Notes on the Closing Date unless and until it shall have received the documents listed in Section 2.12.

(c) Each Note authenticated and delivered by the Indenture Trustee to or upon an Issuer Order on or prior to the Closing Date shall be dated the Closing Date. All other Notes that are authenticated after the Closing Date for any other purpose under this Indenture shall be dated the date of their authentication.

(d) Notes issued upon transfer, exchange or replacement of other Notes shall be issued in authorized denominations reflecting the Outstanding Note Balance so transferred, exchanged or replaced, but shall represent only the Outstanding Note Balance so transferred, exchanged or replaced. In the event that any Note is divided into more than one Note in accordance with this Article II, such Outstanding Note Balance shall be divided among the Notes delivered in exchange therefor.

(e) No Note shall be entitled to any benefit under this Indenture or be valid or obligatory for any purpose unless there appears on such Note a certificate of authentication, substantially in the form provided for herein, executed by the Indenture Trustee by the manual signature of a Responsible Officer of the Indenture Trustee, and such executed certificate upon any Note shall be conclusive evidence, and the only evidence, that such Note has been duly authenticated and delivered.

Section 2.06. Temporary Notes. Except for the Notes maintained in book-entry form, temporary Notes shall be issuable in any authorized denomination, and substantially in the form of the Definitive Notes but with such omissions, insertions and variations as may be appropriate for temporary Notes, all as may be determined by the Issuer. Every such temporary Note shall be executed by the Issuer and authenticated by the Indenture Trustee upon the same conditions and in substantially the same manner, and with the same effect, as the Definitive Notes. Without unreasonable delay, the Issuer will execute and deliver to the Indenture Trustee Definitive Notes (other than in the case of Notes in global form) and thereupon any or all temporary Notes (other than in the case of Notes in global form) may be surrendered in exchange therefor, at the Corporate Trust Office, and the Indenture Trustee shall authenticate and deliver in exchange for such temporary Notes an equal aggregate principal amount of Definitive Notes. Such exchange shall be made by

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the Issuer at its own expense and without any charge therefor. Until so exchanged, the temporary Notes shall in all respects be entitled to the same benefits and subject to the same limitations under this Indenture as Definitive Notes authenticated and delivered hereunder.

Section 2.07. Registration, Registration of Transfer and Exchange.

(a) The Indenture Trustee (in such capacity, the “Note Registrar”) shall cause to be kept at its Corporate Trust Office a register (the “Note Register”), in which, subject to such reasonable regulations as it may prescribe, the Note Registrar shall provide for the registration of the Notes and the registration of transfers of such Notes. The Notes are intended to be obligations in registered form for purposes of Section 163(f), Section 871(h)(2) and Section 881(c)(2) of the Code.

(b) Each Person who has or who acquires any Ownership Interest in a Note shall be deemed by the acceptance or acquisition of such Ownership Interest to have agreed to be bound by the provisions of this Section 2.07 and Section 2.08.

(c) Each purchaser of Global Notes, other than the Initial Purchasers, will be deemed to have represented and agreed as follows:

(i) The purchaser (other than Sunrun or any affiliate thereof that acquires a Class B Note) (A) (1) is a QIB, (2) is aware that the sale to it is being made in reliance on Rule 144A and (3) is acquiring the Notes or interests therein for its own account or for the account of a QIB or (B) is not a U.S. Person and is purchasing the Notes or interests therein in an offshore transaction pursuant to Regulation S.

(ii) The purchaser understands that the Notes and interests therein are being offered in a transaction not involving any public offering in the United States within the meaning of the Securities Act, that the Notes have not been and will not be registered under the Securities Act and that (A) if in the future it decides to offer, resell, pledge or otherwise transfer any of the Notes or any interests therein, such Class A Notes and Class B Notes or the interests therein may not be offered, resold, pledged or otherwise transferred in denominations lower than $100,000 and $750,000, respectively, and, in each case, in integral multiples of $1,000 in excess thereof, and only (1) in the United States to a person whom the seller reasonably believes is a QIB in a transaction meeting the requirements of Rule 144A, (2) outside the United States in a transaction complying with the provisions of Regulation S under the Securities Act, or (3) pursuant to another exemption from registration under the Securities Act (if available and evidenced by an opinion of counsel acceptable to the Issuer and the Indenture Trustee), in each of cases (1) through (3) in accordance with any applicable securities laws of any State of the United States and any other applicable jurisdiction, and that (B) the purchaser will, and each subsequent Holder is required to, notify any subsequent purchaser of such Notes or interests therein from it of the resale.

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restrictions referred to in (A) above. Notwithstanding the foregoing restriction, any Note that has been properly issued in an amount no less than the applicable Minimum Denomination, or any interest therein, may be offered, resold, pledged or otherwise transferred in denominations less than the applicable Minimum Denomination if such lesser denomination is solely a result of a reduction in principal due to payments made in accordance with this Indenture.

(iii) The purchaser understands that the Notes will bear a legend substantially to the following effect:

THIS NOTE (OR ITS PREDECESSOR) WAS ORIGINALY ISSUED IN A TRANSACTION EXEMPT FROM REGISTRATION UNDER THE UNITED STATES SECURITIES ACT OF 1933, AS AMENDED (THE “SECURITIES ACT”), AND NEITHER THIS NOTE NOR ANY INTEREST HEREIN MAY BE OFFERED, SOLD OR OTHERWISE TRANSFERRED IN THE ABSENCE OF SUCH REGISTRATION OR AN APPLICABLE EXEMPTION THEREFROM. EACH PURCHASER OF THIS NOTE OR ANY INTEREST HEREIN IS HEREBY NOTIFIED THAT THE SELLER OF THIS NOTE OR INTEREST HEREIN MAY BE RELYING ON THE EXEMPTION FROM THE PROVISIONS OF SECTION 5 OF THE SECURITIES ACT PROVIDED BY RULE 144A THEREUNDER.

THE HOLDER OF THIS NOTE OR ANY INTEREST HEREIN AGREES FOR THE BENEFIT OF THE ISSUER THAT (A) THIS NOTE AND ANY INTEREST HEREIN MAY NOT BE OFFERED, RESOLD, PLEDGED OR OTHERWISE TRANSFERRED IN DENOMINATIONS LOWER THAN $100,000 FOR CLASS A NOTES/$750,000 FOR CLASS B NOTES AND IN INTEGRAL MULTIPLES OF $1,000 IN EXCESS THEREOF, AND ONLY (I) IN THE UNITED STATES TO A PERSON WHOM THE SELLER REASONABLY BELIEVES IS A QUALIFIED INSTITUTIONAL BUYER (AS DEFINED IN RULE 144A UNDER THE SECURITIES ACT) IN A TRANSACTION MEETING THE REQUIREMENTS OF RULE 144A, (II) OUTSIDE THE UNITED STATES IN AN OFFSHORE TRANSACTION IN ACCORDANCE WITH REGULATION S, OR (III) PURSUANT TO ANOTHER EXEMPTION FROM REGISTRATION UNDER THE SECURITIES ACT (IF AVAILABLE AND EVIDENCED BY AN OPINION OF COUNSEL ACCEPTABLE TO THE ISSUER AND THE INDENTURE TRUSTEE), IN EACH OF CASES (I) THROUGH (III) IN ACCORDANCE WITH ANY APPLICABLE SECURITIES LAWS OF

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ANY STATE OF THE UNITED STATES AND ANY OTHER APPLICABLE JURISDICTION, AND (B) THE
HOLDER WILL, AND EACH SUBSEQUENT HOLDER IS REQUIRED TO, NOTIFY ANY PURCHASER OF THIS
NOTE OR ANY INTEREST HEREIN FROM IT OF THE RESALE RESTRICTIONS REFERRED TO IN (A) ABOVE.
NOTWITHSTANDING THE FOREGOING RESTRICTION, ANY NOTE THAT HAS BEEN PROPERLY ISSUED IN
AN AMOUNT NO LESS THAN $100,000 FOR CLASS A NOTES/$750,000 FOR CLASS B NOTES, OR ANY
INTEREST THEREIN, MAY BE OFFERED, RESOLD, PLEDGED OR OTHERWISE TRANSFERRED IN
DENOMINATIONS LESS THAN $100,000 FOR CLASS A NOTES/$750,000 FOR CLASS B NOTES IF SUCH LESSER
DENOMINATION IS SOLELY A RESULT OF A REDUCTION IN PRINCIPAL DUE TO PAYMENTS MADE IN
ACCORDANCE WITH THIS INDENTURE.

THE PURCHASER UNDERSTANDS THAT THE ISSUER MAY RECEIVE A LIST OF PARTICIPANTS HOLDING
POSITIONS IN THE NOTES FROM THE SECURITIES DEPOSITORY.

(iv) The purchaser understands that any Note offered in reliance on Regulation S will, during the 40-day distribution
compliance period commencing on the day after the later of the commencement of the offering and the date of original issuance of the
Notes, bear a legend substantially to the following effect:

THIS NOTE IS A TEMPORARY GLOBAL NOTE FOR PURPOSES OF REGULATION S UNDER THE
SECURITIES ACT WHICH IS EXCHANGEABLE FOR A REGULATION S PERMANENT GLOBAL NOTE
SUBJECT TO THE TERMS AND CONDITIONS SET FORTH IN THE INDENTURE.

PRIOR TO THE DATE THAT IS 40 DAYS AFTER THE LATER OF THE COMMENCEMENT OF THE OFFERING
AND THE ORIGINAL ISSUE DATE OF THE NOTES, THIS NOTE MAY NOT BE OFFERED, SOLD, PLEDGED
OR OTHERWISE TRANSFERRED IN THE UNITED STATES OR TO A U.S. PERSON EXCEPT PURSUANT TO
AN EXEMPTION FROM THE REGISTRATION REQUIREMENTS OF THE SECURITIES ACT.

Following the 40-day distribution compliance period, interests in a Regulation S Temporary Global Note will be exchanged for interests
in a Regulation S Permanent Global Note.

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Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.
(v) Each purchaser and transferee by its purchase of a Class A Note or Ownership Interest therein shall be deemed to have represented and warranted that (a) it is not acquiring the Note or interest therein for or on behalf of or with the assets of any employee benefit plan as defined in Section 3(3) of the Employment Retirement Income Security Act of 1974, as amended (“ERISA”) that is subject to Title I of ERISA or any other “plan” as defined in Section 4975(e)(1) of the Code that is subject to Section 4975 of the Code or any entity whose underlying assets include plan assets (within the meaning of 29 C.F.R. 2510.3-101, as modified by Section 3(3) of ERISA) by reason of an employee benefit plan’s or plan’s investment in such entity (each a “Benefit Plan Investor”), or any “governmental plan” within the meaning of Section 3(32) of ERISA or “church plan” within the meaning of Section 3(33) of ERISA that is subject to any substantially similar provision of state or local law (“Similar Law”), or (b) if the purchaser or transferee is a Benefit Plan Investor or a governmental plan or church plan subject to Similar Law, the purchaser and transferee and the fiduciary of such Benefit Plan Investor or governmental plan or church plan by its purchase of the Note or interest therein shall be deemed to have represented and warranted that the purchase and holding of the Note or interest therein will not result in a non-exempt prohibited transaction under ERISA or Section 4975 of the Code or violation of Similar Law and will be consistent with any applicable fiduciary duties that may be imposed upon the purchaser or transferee.

(vi) Each purchaser and transferee by its purchase of a Class B Note or Ownership Interest therein shall be deemed to have represented and warranted that at the time of its purchase and throughout the period that it holds such Class B Note or interest therein, that (1) it is not and will not be a Benefit Plan Investor (2) it will not be purchasing the Class B Note with the assets of a Government Plan or church plan and (3) it will not sell or otherwise transfer the Class B Note or interest therein to any person without first obtaining the same foregoing representations, warranties and covenants from that person.

(vii) The purchaser understands that the Issuer may receive a list of participants holding positions in the Notes from the Securities Depository.

(viii) Each purchaser and transferee by its purchase of a Note or interest therein shall be deemed to have agreed to treat the Note as indebtedness and indicate on all federal, state and local income tax and information returns and reports required to be filed with respect to the Note, under any applicable federal, state or local tax statute or any rule or regulation under any of them, that the Note is indebtedness unless otherwise required by applicable law.

(ix) Each purchaser and transferee of a Class A Note that is a Benefit Plan Investor, by its purchase of a Note or interest therein, to the extent that the DOL Final Fiduciary Rule remains in effect shall be deemed to have represented and warranted that (i) it has not received

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and is not receiving investment advice from the ERISA Transaction Parties with respect to the Benefit Plan Investor’s investment in the Notes, (ii) none of the ERISA Transaction Parties has made or will make any recommendations as to the advisability of the acquiring, holding or continuing to hold, disposal of, or exchange of the Notes, or has provided or will provide investment advice, and (iii) that such purchaser or transferee is an Eligible Benefit Plan Investor.

(d) Other than with respect to Notes maintained in book-entry form, at the option of a Noteholder, Notes may be exchanged for other Notes of any authorized denominations and of a like Outstanding Note Balance and Class upon surrender of the Notes to be exchanged at the Corporate Trust Office. Whenever any Notes are so surrendered for exchange, the Issuer shall execute, and the Indenture Trustee shall authenticate and deliver, the Notes which the Noteholder making the exchange is entitled to receive.

(e) Other than with respect to Notes maintained in book-entry form, any Note presented or surrendered for registration of transfer or exchange shall be duly endorsed, or be accompanied by a written instrument of transfer in form satisfactory to the Indenture Trustee duly executed. All Notes issued upon any registration of transfer or exchange of Notes shall be the valid obligations of the Issuer, evidencing the same rights, and entitled to the same benefits under this Indenture, as the Class of Notes surrendered upon such registration of transfer or exchange. No service charge shall be made for any registration of transfer or exchange of Notes, but the Issuer and the Indenture Trustee may require payment of a sum sufficient to cover any tax or other governmental charge as may be imposed in connection with any registration of transfer or exchange of Notes, other than exchanges pursuant to Section 2.08 not involving any transfer.

The Notes have not been and will not be registered under the Securities Act or the securities laws of any jurisdiction. Consequently, the Notes are not transferable other than pursuant to an exemption from the registration requirements of the Securities Act and satisfaction of provisions set forth in this Indenture.

(f) Each purchaser and transferee by its purchase of a Class B Note or a beneficial interest therein shall be deemed to have made all of the certifications, representations, warranties and covenants set forth therein (which shall include those set forth in Section 2.07(c)(i)-(ix) and Section 2.08(e)). Any transfer of a beneficial interest in a Class B Note in violation of any of the foregoing will be of no force and effect and void ab initio.

(g) Sunrun and any affiliate thereof, by its holding, transfer or purchase of the Class B Notes on and after the Closing Date, will be deemed to have represented that it is an Institutional Accredited Investor.

Section 2.08. Transfer and Exchange.

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(a) The transfer and exchange of Global Notes or beneficial interests therein shall be effected through the Securities Depository, in accordance with this Indenture and the procedures of the Securities Depository therefor, which shall include restrictions on transfer comparable to those set forth herein to the extent required by the Securities Act. Beneficial interests in a Global Note may be transferred to persons who take delivery thereof in the form of a beneficial interest in the same Global Note in accordance with the transfer restrictions set forth in the legends in subsections (c)(iii) and (c)(iv) of Section 2.07, as applicable. Transfers of beneficial interests in the Global Notes to persons required or permitted to take delivery thereof in the form of an interest in another Global Note shall be permitted as follows:

(i) Rule 144A Global Note to Regulation S Global Note. If, at any time, an owner of a beneficial interest in a Rule 144A Global Note deposited with the Securities Depository (or the Indenture Trustee as custodian for the Securities Depository) wishes to transfer its interest in such Rule 144A Global Note to a person who is required or permitted to take delivery thereof in the form of an interest in a Regulation S Global Note, such owner shall, subject to compliance with the applicable procedures described herein (the “Applicable Procedures”), exchange or cause the exchange of such interest for an equivalent beneficial interest in a Regulation S Global Note as provided in this Section 2.08(a)(i). Upon receipt by the Indenture Trustee of (1) instructions given in accordance with the Applicable Procedures from an Agent Member directing the Indenture Trustee to credit or cause to be credited a beneficial interest in the Regulation S Global Note in an amount equal to the beneficial interest in the Rule 144A Global Note to be exchanged, (2) a written order given in accordance with the Applicable Procedures containing information regarding the participant account of the Securities Depository and the Euroclear or Clearstream account to be credited with such increase, and (3) a certificate in the form of Exhibit B-1 hereto given by the Note Owner of such beneficial interest stating that the transfer of such interest has been made in compliance with the transfer restrictions applicable to the Global Notes and pursuant to and in accordance with Rule 903 or Rule 904 of Regulation S, then the Indenture Trustee, as Note Registrar, shall instruct the Securities Depository to reduce or cause to be reduced the initial Outstanding Note Balance of the applicable Rule 144A Global Note and to increase or cause to be increased the initial Outstanding Note Balance of the applicable Regulation S Global Note by the initial principal amount of the beneficial interest in the Rule 144A Global Note to be exchanged, to credit or cause to be credited to the account of the person specified in such instructions a beneficial interest in the Regulation S Global Note equal to the reduction in the initial Outstanding Note Balance of the Rule 144A Global Note, and to debit, or cause to be debited, from the account of the person making such exchange or transfer the beneficial interest in the Rule 144A Global Note that is being exchanged or transferred.

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(ii) **Regulation S Global Note to Rule 144A Global Note.** If, at any time an owner of a beneficial interest in a Regulation S Global Note deposited with the Securities Depository or with the Indenture Trustee as custodian for the Securities Depository wishes to transfer its interest in such Regulation S Global Note to a person who is required or permitted to take delivery thereof in the form of an interest in a Rule 144A Global Note, such owner shall, subject to the Applicable Procedures, exchange or cause the exchange of such interest for an equivalent beneficial interest in a Rule 144A Global Note as provided in this Section 2.08(a)(ii). Upon receipt by the Indenture Trustee of (1) instructions from Euroclear or Clearstream, if applicable, and the Securities Depository, directing the Indenture Trustee, as Note Registrar, to credit or cause to be credited a beneficial interest in the Rule 144A Global Note equal to the beneficial interest in the Regulation S Global Note to be exchanged, such instructions to contain information regarding the participant account with the Securities Depository to be credited with such increase, (2) a written order given in accordance with the Applicable Procedures containing information regarding the participant account of the Securities Depository and (3) if such transfer is being effected prior to the expiration of the “40-day distribution compliance period” (as defined by Regulation S under the Securities Act), a certificate in the form of Exhibit B-2 attached hereto given by the Note Owner of such beneficial interest stating (A) if the transfer is pursuant to Rule 144A, that the person transferring such interest in a Regulation S Global Note reasonably believes that the person acquiring such interest in a Rule 144A Global Note is a QIB and is obtaining such beneficial interest in a transaction meeting the requirements of Rule 144A and any applicable blue sky or securities laws of any State of the United States, (B) that the transfer complies with the requirements of Rule 144A under the Securities Act and any applicable blue sky or securities laws of any State of the United States or (C) if the transfer is pursuant to any other exemption from the registration requirements of the Securities Act, that the transfer of such interest has been made in compliance with the transfer restrictions applicable to the Global Notes and pursuant to and in accordance with the requirements of the exemption claimed, such statement to be supported by an Opinion of Counsel from the transferee or the transferor in form reasonably acceptable to the Issuer and to the Indenture Trustee, then the Indenture Trustee, as Note Registrar, shall instruct the Securities Depository to reduce or cause to be reduced the initial Outstanding Note Balance of such Regulation S Global Note and to increase or cause to be increased the initial Outstanding Note Balance of the applicable Rule 144A Global Note by the initial principal amount of the beneficial interest in the Regulation S Global Note to be exchanged, and the Indenture Trustee, as Note Registrar, shall instruct the Securities Depository, concurrently with such reduction, to credit or cause to be credited to the account of the person specified in such instructions a beneficial interest in the applicable Rule 144A Global Note equal to the reduction in the Outstanding Note Balance at maturity of such Regulation S Global Note and to debit or cause to be debited

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from the account of the person making such transfer the beneficial interest in the Regulation S Global Note that is being transferred.

(b) **Transfer and Exchange from Definitive Notes to Definitive Notes.** When Definitive Notes are presented by a Holder to the Note Registrar with a request:

(i) to register the transfer of Definitive Notes in the form of other Definitive Notes; or

(ii) to exchange such Definitive Notes for an equal principal amount of Definitive Notes of other authorized denominations, the Note Registrar shall register the transfer or make the exchange as requested; *provided, however,* that the Definitive Notes presented or surrendered for register of transfer or exchange shall be duly endorsed or accompanied by a written instruction of transfer in form satisfactory to the Note Registrar duly executed by such Holder or by his attorney, duly authorized in writing; and

(i) if such Definitive Note is being transferred to a QIB in accordance with Rule 144A or in an offshore transaction pursuant to Regulation S, a certification to that effect from such Holder (in the form attached as Exhibit B-3 hereto); or

(ii) if such Definitive Note is being transferred in reliance on any other exemption from the registration requirements of the Securities Act, a certification to that effect from such Holder (in the form attached as Exhibit B-3 hereto) and an Opinion of Counsel from such Holder or the transferee reasonably acceptable to the Issuer and to the Indenture Trustee to the effect that such transfer is in compliance with the Securities Act.

(c) **Restrictions on Transfer and Exchange of Global Notes.** Notwithstanding any other provision of this Indenture, a Global Note may not be transferred except by the Securities Depository to a nominee of the Securities Depository or by a nominee of the Securities Depository to the Securities Depository or another nominee of the Securities Depository or by the Securities Depository or any such nominee to a successor Securities Depository or a nominee of such successor Securities Depository.

(d) **Initial Issuance of the Notes.** The Initial Purchasers shall not be required to deliver, and neither the Issuer nor the Indenture Trustee shall demand therefrom, any of the certifications or opinions described in this Section 2.08 in connection with the initial issuance of the Notes and the delivery thereof by the Issuer.

(e) **Tax Transfer Restrictions for the Class B Notes.** Notwithstanding anything to the contrary herein, no transfer of a beneficial interest in a Class B Note shall be effective, and any attempted transfer shall be void *ab initio,* unless, each transferee satisfies each of the items in clauses

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(i) through (ix) below. By its acceptance of an Ownership Interest in a Class B Note, each transferee shall be deemed to have represented and agreed as follows:

(i) Either (A) it is not and will not become, for U.S. federal income tax purposes, a partnership, S corporation, or grantor trust (each such entity a “flow-through entity”) or (B) if it is or becomes a flow-through entity, then (1) none of the direct or indirect beneficial owners of any of the interests in such flow-through entity has or ever will have 50% or more of the value of its interest in such flow-through entity attributable to the beneficial interest of such flow-through entity in the Class B Notes, other interest (direct or indirect) in the Issuer, or any interest created under this Indenture and (2) it is not and will not be a principal purpose of the arrangement involving the flow-through entity’s beneficial interest in any Class B Note to permit any entity to satisfy the 100-partner limitation of Section 1.7704-1(h)(1)(ii) of the Treasury Regulations necessary for such entity not to be classified as a publicly traded partnership for U.S. federal income tax purposes.

(ii) It will not (A) acquire, sell, transfer, assign, pledge or otherwise dispose of any of its interests in a Class B Note (or any interest therein that is described in Section 1.7704-1(a)(2)(i)(B) of the Treasury Regulations) on or through (x) a U.S. national, regional or local securities exchange, (y) a foreign securities exchange or (z) an inter-dealer quotation system that regularly disseminates firm buy or sell quotations by identified brokers or dealers (including, without limitation, the National Association of Securities Dealers Automated Quotation System) ((x), (y) and (z), collectively, an “Exchange”) or (B) cause any of its interests in the Class B Note to be marketed on or through an Exchange.

(iii) It will not cause any beneficial interest in a Class B Note to be traded or otherwise marketed on or through an “established securities market” or a “secondary market (or the substantial equivalent thereof),” each within the meaning of Section 7704(b) of the Code and the Treasury Regulations promulgated thereunder, including, without limitation, an interdealer quotation system that regularly disseminates firm buy or sell quotations.

(iv) Its beneficial interest in the Class B Note is not and will not be in an amount that is less than the Minimum Denomination for the Class B Notes, and it does not and will not hold any beneficial interest in the Class B Note on behalf of any person whose beneficial interest in the Class B Note is in an amount that is less than the Minimum Denomination for the Class B Notes set forth in this Indenture. It will not sell, transfer, assign, participate, or otherwise dispose of any beneficial interest in the Class B Note or enter into any financial instrument or contract the value of which is determined by reference in whole or in part to any Class B Note, in each case, if the effect of doing so would be that the beneficial interest of any person in a Class B Note would be in an amount that is less than the Minimum Denomination for the Class B Notes. Notwithstanding the foregoing restriction, any Class B Note that has originally been properly issued in an amount no less than the Class B

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Minimum Denomination, or any interest therein, may be offered, resold, pledged or otherwise transferred in denominations less than the
Minimum Denomination for the Class B Notes if such lesser denomination is solely a result of a reduction in principal due to payments
made in accordance with this Indenture.

(v) It will not enter into any financial instrument the payment on which, or the value of which, is determined in whole or in
part by reference to an interest in the Class B Note (including the amount of payments on the Class B Note, the value of the Class B Note
or any contract that otherwise is described in Section 1.7704-1(a)(2)(i)(B) of the Treasury Regulations).

(vi) It will not use the Class B Note as collateral for the issuance of any securities that could cause the Issuer to become
subject to taxation as a corporation or a publicly traded partnership taxable as a corporation for U.S. federal income tax purposes.

(vii) It will not take any action that could reasonably be expected to cause, and will not omit to take any action, which
omission could reasonably be expected to cause, the Issuer to become taxable as a corporation for U.S. federal income tax purposes.

(viii) It acknowledges that the Sponsor, the Originator, the Indenture Trustee, the Note Registrar, the Issuer and others will
rely on the truth and accuracy of the foregoing representations, warranties and covenants and agrees that if it becomes aware that any of
the foregoing are no longer accurate, it shall notify the Issuer.

(ix) It will treat the Class B Note as indebtedness and indicate on all U.S. federal and state income tax and information
returns and reports required to be filed with respect to the Class B Note, under any applicable U.S. federal or state tax statute, rule, or
regulation, that the Class B Note is indebtedness.

The Indenture Trustee shall maintain a file of all such transferee certifications delivered to it and shall make such transferee
certifications available to the Issuer upon request.

(f) Class B Notes. Notwithstanding anything to the contrary in this Indenture, any provision requiring that the Class B Notes may only
be acquired or held by a QIB shall not apply to Sunrun or any of its affiliates. Sunrun or any of its affiliates may acquire or hold Class B Notes
so long as such entity is an Institutional Accredited Investor.

Section 2.09. Mutilated, Destroyed, Lost or Stolen Notes.

(a) If (i) any mutilated Note is surrendered to the Indenture Trustee or the Indenture Trustee receives evidence to its satisfaction of
the destruction, loss or theft of any Note, and (ii) there is delivered to the Indenture Trustee such security or indemnity as may be required by the Indenture

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Trustee to hold each of the Issuer and the Indenture Trustee harmless, then, in the absence of actual notice to the Issuer or the Indenture Trustee that such Note has been acquired by a protected purchaser, the Issuer shall execute, and the Indenture Trustee shall authenticate and deliver upon an Issuer Order, in exchange for or in lieu of any such mutilated, destroyed, lost or stolen Note, a new Note or Notes of the same tenor and Class and principal balance bearing a number not contemporaneously outstanding; provided, however, that if any such mutilated, destroyed, lost or stolen Note shall have become subject to receipt of payment in full, instead of issuing a new Note, the Indenture Trustee may make a payment with respect to such Note without surrender thereof, except that any mutilated Note shall be surrendered. If, after the delivery of such new Note or payment with respect to a destroyed, lost or stolen Note pursuant to the proviso to the preceding sentence, a protected purchaser of the original Note in lieu of which such new Note was issued presents for receipt of payments such original Note, the Issuer and the Indenture Trustee shall be entitled to recover such new Note (or such payment) from the Person to whom it was delivered or any Person taking such new Note from such Person, except a protected purchaser, and each of the Issuer and the Indenture Trustee shall be entitled to recover upon the security or indemnity provided therefor to the extent of any loss, damage or cost incurred by the Issuer or the Indenture Trustee in connection therewith.

(b) Upon the issuance of any new Note under this Section 2.09, the Issuer or the Indenture Trustee may require the payment of a sum sufficient to cover any tax or other governmental charge that may be imposed in relation thereto.

(c) Every new Note issued pursuant to this Section 2.09 in lieu of any destroyed, lost or stolen Note shall constitute an original additional contractual obligation of the Issuer, whether or not such destroyed, lost or stolen Note shall be at any time enforceable by anyone, and shall be entitled to all the benefits of this Indenture equally and proportionately with any and all other Notes duly issued hereunder.

(d) The provisions of this Section 2.09 are exclusive and shall preclude (to the extent lawful) all other rights and remedies with respect to the replacement or payment with respect to mutilated, destroyed, lost or stolen Notes.

Section 2.10. Persons Deemed Noteholders. Before due presentment for registration of transfer of any Note, the Issuer, the Indenture Trustee and any agent of the Issuer or the Indenture Trustee may treat the Person in whose name any Note is registered as the owner of such Note (a) on the applicable Record Date for the purpose of receiving payments with respect to principal and interest on such Note and (b) on any date for all other purposes whatsoever, whether or not such Note be overdue, and none of the Issuer, the Indenture Trustee nor any agent of the Issuer or the Indenture Trustee shall be affected by any notice to the contrary.

Section 2.11. Cancellation of Notes. All Definitive Notes surrendered for payment, registration of transfer, exchange, or prepayment shall, if surrendered to any Person other than the
Indenture Trustee, be delivered to the Indenture Trustee and shall be promptly canceled by it. The Issuer may at any time deliver to the Indenture Trustee for cancellation any Note previously authenticated and delivered hereunder which the Issuer may have acquired in any manner whatsoever, and all Notes so delivered shall be promptly canceled by the Indenture Trustee. No Notes shall be authenticated in lieu of or in exchange for any Notes canceled as provided in this Section 2.11 except as expressly permitted by this Indenture. All canceled Notes shall be held and disposed of by the Indenture Trustee in accordance with its standard retention and disposal policy.

Section 2.12. Conditions to Closing. The Notes shall be executed, authenticated and delivered on the Closing Date in accordance with Section 2.05 and, upon receipt by the Indenture Trustee of the following:

- (a) an Issuer Order authorizing the authentication and delivery of such Notes by the Indenture Trustee;
- (b) the original Notes executed by the Issuer and true and correct copies of the fully executed Transaction Documents;
- (c) Opinions of Counsel addressed to the Indenture Trustee, the Initial Purchasers, and the Rating Agency in form and substance satisfactory to the Indenture Trustee, the Initial Purchasers and the Rating Agency addressing corporate, security interest, tax and bankruptcy matters;
- (d) an Officer’s Certificate of an Authorized Officer of the Issuer, stating that:
  - (i) all representations and warranties of the Issuer contained in the Transaction Documents are true and correct, and no defaults of the Issuer exist under the Transaction Documents; and
  - (ii) the issuance of the Notes will not result in any breach of any of the terms, conditions or provisions of, or constitute a default under, this Indenture or any other Transaction Document, the Issuer Operating Agreement or any other constituent documents of the Issuer or any indenture, mortgage, deed of trust or other agreement or instrument to which the Issuer is a party or by which it is bound, or any order of any court or administrative agency entered in any proceeding to which the Issuer is a party or by which it may be bound or to which it may be subject, and that all conditions precedent provided in this Indenture relating to the authentication and delivery of the Notes have been fully satisfied; and
  - (iii) the conditions precedent in this Indenture relating to the authentication and delivery of the Notes have been satisfied;
- (e) an Officer’s Certificate dated as of the Closing Date, of an Authorized Officer of the Depositor that:

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(i) the Depositor is not in default under any of the Transaction Documents to which it is a party, and the transfer of the Depositor Conveyed Property by the Depositor and the simultaneous Grant of the Trust Estate to the Indenture Trustee by the Issuer will not result in any breach of any of the terms, conditions or provisions of, or constitute a material default under, its organizational documents or any other constituent documents of it or any indenture, mortgage, deed of trust or other agreement or instrument to which it is a party or by which it is bound, or any order of any court or administrative agency entered in any proceeding to which it is a party or by which it may be bound or to which it may be subject; and

(ii) all representations and warranties of it contained in each of the Transaction Documents to which it is a party are true and correct;

(f) an Officer’s Certificate dated as of the Closing Date, of an Authorized Officer of the Sunrun Athena Holdco that:

(i) Sunrun Athena Holdco is not in default under any of the Transaction Documents to which it is a party, and the transfer of the Conveyed Property by Sunrun Athena Holdco and the simultaneous Grant of the Trust Estate to the Indenture Trustee by the Issuer will not result in any breach of any of the terms, conditions or provisions of, or constitute a material default under, its organizational documents or any other constituent documents of it or any indenture, mortgage, deed of trust or other agreement or instrument to which it is a party or by which it is bound, or any order of any court or administrative agency entered in any proceeding to which it is a party or by which it may be bound or to which it may be subject; and

(ii) all representations and warranties of it contained in each of the Transaction Documents to which it is a party are true and correct;

(g) an Officer’s Certificate dated as of the Closing Date, of an Authorized Officer of the Sunrun Athena Investor that:

(i) Sunrun Athena Investor is not in default under any of the Transaction Documents to which it is a party, and the transfer of the Conveyed Property by Sunrun Athena Holdco and the simultaneous Grant of the Trust Estate to the Indenture Trustee by the Issuer will not result in any breach of any of the terms, conditions or provisions of, or constitute a material default under, its organizational documents or any other constituent documents of it or any indenture, mortgage, deed of trust or other agreement or instrument to which it is a party or by which it is bound, or any order of any court or administrative agency entered in any proceeding to which it is a party or by which it may be bound or to which it may be subject; and

20

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(ii) all representations and warranties of it contained in each of the Transaction Documents to which it is a party are true and correct;

(h) an Officer’s Certificate dated as of the Closing Date, of an Authorized Officer of the Sunrun that:

(i) Sunrun is not in default under any of the Transaction Documents to which it is a party, and the transfer of the Conveyed Property by Sunrun and the simultaneous Grant of the Trust Estate to the Indenture Trustee by the Issuer will not result in any breach of any of the terms, conditions or provisions of, or constitute a material default under, its organizational documents or any other constituent documents of it or any indenture, mortgage, deed of trust or other agreement or instrument to which it is a party or by which it is bound, or any order of any court or administrative agency entered in any proceeding to which it is a party or by which it may be bound or to which it may be subject;

(ii) all representations and warranties of it contained in each of the Transaction Documents to which it is a party are true and correct; and

(iii) the conditions precedent in this Indenture relating to the authentication and delivery of the Notes have been satisfied;

(i) a Secretary’s Certificate dated as of the Closing Date addressing each of the Issuer, Sunrun, Sunrun Athena Holdco, Sunrun Athena Investor and the Depositor regarding certain organizational matters and the incumbency of the signatures of the Issuer, the Transaction Manager and the Depositor;

(j) presentment of all applicable UCC termination statements or partial releases (collectively, the “Termination Statements”) terminating the Liens of creditors of the Depositor or any other Person with respect to any part of the Trust Estate (except as expressly contemplated by the Transaction Documents) and the Financing Statements (which shall constitute all of the Perfection UCCs with respect to the Closing Date) to the proper Person for filing to perfect the Indenture Trustee’s first priority security interest in such Trust Estate Granted on the Closing Date registered in the name of the Indenture Trustee or its nominee and agent (a copy of the file stamped Financing Statements and Termination Statements shall be delivered by the Transaction Manager to the Indenture Trustee);

(k) evidence that the Indenture Trustee has established the Collection Account, the Liquidity Reserve Account, the Supplemental Reserve Account and the Tax Loss Insurance Proceeds Account;

(l) delivery by the Custodian to the Issuer and the Indenture Trustee of an executed Closing Date Certification;

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(m) delivery by the Rating Agency to the Issuer and the Indenture Trustee of its rating letter assigning a rating to the Class A Notes of at least “A- (sf)” by KBRA;

(n) all collections received in respect of the Depositor Conveyed Property for any period following the Cut-Off Date are retained by the Managing Members or the Project Companies or, to the extent not so retained, an equivalent amount has been deposited into the Collection Account on the Closing Date;

(o) the Issuer shall have deposited the Liquidity Reserve Account Required Balance into the Liquidity Reserve Account;

(p) the Issuer shall have deposited the Supplemental Reserve Account Closing Date Deposit into the Supplemental Reserve Account;

(q) the Issuer shall have caused to be deposited the Collection Account Closing Date Deposit into the Collection Account;

(r) the Issuer shall not be insolvent and will not become insolvent as a result of the Grant pursuant to this Indenture or the transactions contemplated by the Transaction Documents; and

(s) any other certificate, document or instrument reasonably requested by the Initial Purchasers or the Indenture Trustee.

Section 2.13. Definitive Notes. The Notes will be issued as Definitive Notes, rather than to DTC or its nominee, only if (a) the Securities Depository notifies the Issuer and the Indenture Trustee that it is unwilling or unable to continue as Securities Depository with respect to any or all of the Notes or (b) at any time the Securities Depository shall no longer be registered or in good standing under the Securities Exchange Act of 1934, as amended, or other applicable statute or regulation, and in either case a successor Securities Depository is not appointed by the Issuer within 90 days after the Issuer receives notice or becomes aware of such condition, as the case may be. Upon the occurrence of any of the events described in the immediately preceding paragraph, the Issuer will issue the Notes of each Class in the form of Definitive Notes and thereafter the Indenture Trustee will recognize the holders of such Definitive Notes as Noteholders of each such Class under this Indenture. In connection with any proposed transfer outside the book entry system or exchange of beneficial interest in a Note for Notes in definitive registered form, the Issuer shall be required to provide or cause to be provided to the Indenture Trustee all information reasonably available to it that is not otherwise available to the Indenture Trustee and is reasonably requested by the Indenture Trustee and is otherwise necessary to allow the Indenture Trustee to comply with any applicable tax reporting obligations, including without limitation, any cost basis reporting obligations under Section 6045 of the Code. The Indenture Trustee may rely on any such information provided to it or available on the Note Register and shall have no responsibility to verify or ensure

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the accuracy of such information. The Indenture Trustee shall not have any responsibility or liability for any actions taken or not taken by DTC.

**Section 2.14. Access to List of Noteholders’ Names and Addresses.** The Indenture Trustee shall furnish or cause to be furnished to the Transaction Manager within 15 days after receipt by the Indenture Trustee of a request therefor from the Transaction Manager in writing, a list, in such form as the Transaction Manager may reasonably require, of the names and addresses of the Noteholders as of the most recent Record Date.

**ARTICLE III**

**COVENANTS; COLLATERAL; REPRESENTATIONS; WARRANTIES**

**Section 3.01. Performance of Obligations.**

(a) The Issuer will not take any action or permit any action to be taken by others which would release any Person from any of such Person’s covenants or obligations in any Transaction Document or under any instrument or agreement included in the Trust Estate or that would result in the amendment, hypothecation, subordination, termination or discharge of, or impair the validity or effectiveness of, any such instrument or agreement, except as ordered by any bankruptcy or other court or as permitted by, or expressly contemplated in, this Indenture, the Transaction Documents or such other instrument or agreement.

(b) To the extent consistent with the Issuer Operating Agreement, the Issuer may contract with other Persons to assist it in performing its duties hereunder, and any performance of such duties shall be deemed to be action taken by the Issuer. To the extent that the Issuer contracts with other Persons which include or may include the furnishing of reports, notices or correspondence to the Indenture Trustee, the Issuer shall identify such Persons in a written notice to the Indenture Trustee.

(c) The Issuer shall and shall require each Sunrun Party to characterize (i) the transfers of the Conveyed Property pursuant to the Contribution Agreements as absolute transfers for legal purposes, (ii) the Grant of the Trust Estate by the Issuer under this Indenture as a pledge for U.S. federal income tax purposes and for financial accounting purposes, and (iii) the Notes as indebtedness for financial accounting purposes. In this regard, the financial statements of the Sunrun Parties and their consolidated subsidiaries will show the Conveyed Property as owned by the consolidated group and the Notes as indebtedness of the consolidated group (and will contain appropriate footnotes describing the transfer to the Issuer and the pledge to the Indenture Trustee for the benefit of the Noteholders), and the U.S. federal income tax returns of Sunrun and its consolidated subsidiaries will indicate that the Notes are indebtedness unless otherwise required by applicable law. The Issuer will cause each applicable Sunrun Party to file all required tax returns and associated forms, reports, schedules and supplements thereto in a manner consistent with such characterizations unless otherwise required by applicable law.

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(d) The Issuer covenants to pay all material taxes or other similar charges levied by any governmental authority with regard to the Trust Estate (which shall include paying any Affiliate of the Issuer who pays such taxes for any affiliated group of which the Issuer is a member), except to the extent that the validity or amount of such taxes is contested in good faith, via appropriate proceedings and with adequate reserves established and maintained therefor in accordance with GAAP.

(e) The Issuer hereby assumes liability for all liabilities associated with the Trust Estate or created under this Indenture, including but not limited to any obligation arising from the breach or inaccuracy of any representation, warranty or covenant of the Issuer set forth herein. Notwithstanding the foregoing, the Issuer has and shall have no liability with respect to the payment of principal and interest on the Notes, except as otherwise provided in this Indenture.

(f) The Issuer will punctually perform and observe all of its obligations and agreements contained in this Indenture, the Transaction Documents and in the instruments and agreements included in the Trust Estate, including, but not limited to, preparing (or causing to be prepared) and filing (or causing to be filed) all UCC financing statements and continuation statements required to be filed by the terms of this Indenture and the other Transaction Documents in accordance with and within the time periods provided for herein and therein. Except as otherwise expressly provided therein, the Issuer shall not waive, amend, modify, supplement or terminate any Transaction Document or any provision thereof without the consent of the Indenture Trustee (acting at the direction of the Majority Noteholders of the Controlling Class); provided that, in addition, any amendment to any Transaction Document shall be permitted on the same basis that an amendment to this Indenture is permitted pursuant to Section 10.01 hereof.

(g) If an Event of Default or Transaction Manager Termination Event shall arise from the failure of the Transaction Manager to perform any of its duties or obligations under the Transaction Management Agreement, the Issuer shall take all reasonable steps available to it to remedy such failure.

(h) The Issuer shall not waive timely performance or observance by the Transaction Manager or the Depositor of their respective duties under the Transaction Documents if the effect thereof would adversely affect the Holders of the Notes.

(i) If any of the Notes are issued with OID, the Issuer will provide Noteholders with the issue price, amount of OID, issue date and the yield to maturity upon request.

Section 3.02. Negative Covenants. In addition to the restrictions and prohibitions set forth in Sections 3.04, 3.09 and 3.10 and elsewhere herein, the Issuer will not:

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sell, transfer, exchange or otherwise dispose of any portion of its interest in the Trust Estate except as expressly permitted by or expressly contemplated in this Indenture or the other Transaction Documents;

(b) permit the validity or effectiveness of this Indenture or any Grant hereunder to be impaired, or permit the Lien of this Indenture to be amended, hypothecated, subordinated, terminated or discharged, or permit any Person to be released from any covenants or obligations under this Indenture, except as may be expressly permitted by or expressly contemplated in this Indenture or the other Transaction Documents;

(c) permit the Lien of this Indenture not to constitute a valid first priority, perfected security interest in the Trust Estate, subject to Permitted Liens;

(d) take any action or fail to take any action which may cause the Issuer to become classified as an association (or publicly traded partnership) that is taxable as a corporation for U.S. federal income tax purposes;

(e) act in violation of its organizational documents; or

(f) create, incur or suffer, or permit to be created or incurred or to exist, any Lien on any portion of the Trust Estate, except for the Lien created by this Indenture and Permitted Liens.

Section 3.03. Money for Note Payments.

(a) All payments with respect to any Notes which are to be made from amounts withdrawn from the Collection Account pursuant to Section 5.05 shall be punctually made on behalf of the Issuer by the Indenture Trustee, and no amounts so withdrawn from an Account for payments with respect to Notes shall be paid over to the Issuer under any circumstances except as provided in this Section 3.03 and Article V.

(b) When there shall be an Indenture Trustee that is not also the Note Registrar, the Issuer shall furnish, or cause the Note Registrar to furnish, with respect to Global Notes, on each Record Date, and with respect to Definitive Notes, no later than the fifth calendar day after each Record Date, a list, in such form as such Indenture Trustee may reasonably require, of the names and addresses of the Noteholders and of the number of individual Notes and the Outstanding Note Balance and Class of such Notes held by each such Noteholder.

(c) Any money held by the Indenture Trustee in trust for the payment of any amount distributable but unclaimed with respect to any Note shall be held in a non-interest bearing trust account, and if the same remains unclaimed for two years after such amount has become due to such Noteholder, such money shall be discharged from such trust and paid to the Issuer upon an Issuer Order without any further action by any Person; and the Holder of such Note shall thereafter, as an unsecured general creditor, look only to the Issuer for payment thereof (but only to the extent

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of the amounts so paid to the Issuer), and all liability of the Indenture Trustee with respect to such trust money shall thereupon cease. The
Indenture Trustee may adopt and employ, at the expense of the Issuer, any reasonable means of notification of such payment (including, but
not limited to, mailing notice of such payment to Noteholders whose Notes have been called but have not been surrendered for prepayment or
whose right to or interest in moneys due and payable but not claimed is determinable from the records of the Indenture Trustee, at the last
address of record for each such Noteholder).

Section 3.04. Restriction of Issuer Activities. Until the date that is 365 days after the payment by the Issuer in full of all payments on the
Notes, the Issuer will not on or after the date of execution of this Indenture: (i) engage in any business or investment activities other than those
necessary for, incident to, connected with or arising out of, owning and Granting the Trust Estate to the Indenture Trustee for the benefit of the
Noteholders, or contemplated hereby, in the Transaction Documents and the Issuer Operating Agreement; (ii) incur any indebtedness secured
in any manner by, or that has any claim against, the Trust Estate or the Issuer other than indebtedness arising hereunder and in connection with
the Transaction Documents and as otherwise expressly permitted in a Transaction Document; (iii) incur any other indebtedness except as
permitted in the Issuer Operating Agreement; (iv) except to name a new Independent Manager or Special Member (subject to the limitations
and obligations with respect to each such Person set forth in the Issuer Operating Agreement), amend, or propose to the member of the
Depositor for its consent any amendment of, the Issuer Operating Agreement (or, if the Issuer shall be a successor to the Person named as the
Issuer in the first paragraph of this Indenture, amend, consent to amendment or propose any amendment of, the governing instruments of such
successor), without giving notice thereof in writing, 30 days prior to the date on which such amendment is to become effective, to the Rating
Agency; (v) claim any credit on, or make any deduction from the principal or interest payable in respect of, the Notes (other than amounts
properly withheld from such payments under the Code) or assert any claim against any present or former Noteholder by reason of the payment
of the taxes levied or assessed upon any part of the Trust Estate; or (vi) dissolve or liquidate in whole or in part or merge or consolidate with
any other Person, other than in compliance with Section 3.10 if any Notes are Outstanding.

Section 3.05. Protection of Trust Estate.

(a) The Issuer intends the security interest Granted pursuant to this Indenture in favor of the Indenture Trustee for the benefit of the
Noteholders to be prior to all other Liens in respect of the Trust Estate, subject to Permitted Liens, and the Issuer shall take all actions
necessary to obtain and maintain, in favor of the Indenture Trustee and the Noteholders, a first Lien on and a first priority, perfected security
interest in the Trust Estate, subject to Permitted Liens. The Issuer authorizes and shall cause to be filed a financing statement that names the
Issuer as debtor and the Indenture Trustee as secured party to ensure the perfection of the interest of the Indenture Trustee

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in the Trust Estate (including describing the Trust Estate as “all assets of the Debtor whether now existing or hereafter acquired”). Subject to Section 3.05(f), the Issuer will from time to time prepare, execute (or authorize the filing of) and deliver all such supplements and amendments hereto and all such financing statements, continuation statements, instruments of further assurance, and other instruments (all as presented to it in final execution form), and will take such other action as may be necessary or advisable to:

(i) provide further assurance with respect to such Grant and/or Grant more effectively all or any portion of the Trust Estate;

(ii) maintain, preserve or enforce (A) the Lien and security interest (and the priority thereof) in favor of the Indenture Trustee created by this Indenture and (B) the terms and provisions of this Indenture or carry out more effectively the purposes hereof;

(iii) perfect, publish notice of, or protect the validity of, any Grant made or to be made by this Indenture;

(iv) enforce any of the Trust Estate; or

(v) preserve and defend title to any item comprising the Conveyed Property or other item included in the Trust Estate and the rights of the Indenture Trustee and of the Noteholders in such Conveyed Property or other item against the claims of all Persons.

The Issuer shall deliver or cause to be delivered to the Indenture Trustee file stamped copies of, or filing receipts for, any document recorded, registered or filed as provided above, as soon as available following such recording, registration or filing. The Issuer shall cooperate fully with the Indenture Trustee in connection with the obligations set forth above and will execute (or authorize the filing of) any and all documents reasonably required to fulfill the intent of this Section 3.05.

(b) The Issuer hereby irrevocably appoints the Indenture Trustee as its agent and attorney-in-fact (such appointment being coupled with an interest) to execute, or authorize the filing of, upon the Issuer’s failure to do so, any financing statement or continuation statement required pursuant to this Section 3.05; provided, however, that such designation shall not be deemed to create any duty in the Indenture Trustee to monitor the compliance of the Issuer with the foregoing covenants; and provided further, that the Indenture Trustee shall only be obligated to execute or authorize such financing statement or continuation statement upon written direction of the Transaction Manager and upon written notice to a Responsible Officer of the Indenture Trustee of the failure of the Issuer to comply with the provisions of Section 3.05(a); shall not be required to pay any fees, Taxes or other governmental charges in connection therewith; and shall not be required to prepare any financing statement or continuation statement required pursuant to this Section 3.05 (which shall in each case be prepared by the Issuer or the Transaction Manager). The Issuer shall cooperate with the Transaction Manager and provide to the Transaction Manager any information,

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documents or instruments with respect to such financing statement or continuation statement that the Transaction Manager may reasonably require. Neither the Indenture Trustee nor any of its officers, directors, employees, attorneys or agents will be responsible or liable for the existence, genuineness, value or protection of any collateral securing the Notes, for the legality, enforceability, effectiveness or sufficiency of the Transaction Documents or any financing statement or continuation statement for the creation, perfection, continuation, priority, sufficiency or protection of any of the liens, or for any defect or deficiency as to any such matters, for monitoring the status of any lien or performance of the collateral or for the accuracy or sufficiency of any financing statement or continuation statement prepared for its execution or authorization hereunder.

(c) Except as necessary or advisable in connection with the fulfillment by the Indenture Trustee of its duties and obligations described herein or in any Transaction Document, the Indenture Trustee shall not remove any portion of the Trust Estate that consists of money or is evidenced by an instrument, certificate or other writing from the jurisdiction in which it was held as described in the most recent Opinion of Counsel that was delivered pursuant to Section 3.06 (or from the jurisdiction in which it was held as described in the Opinion of Counsel delivered at the Closing Date pursuant to Section 2.12(c), if no Opinion of Counsel has yet been delivered pursuant to Section 3.06) unless the Indenture Trustee shall have first received an Opinion of Counsel to the effect that the Lien created by this Indenture with respect to such property will continue to be maintained after giving effect to such action or actions.

(d) No later than 60 days prior to any of any Sunrun Party making any change in its or their name, identity, jurisdiction of organization or structure which would make any financing statement or continuation statement filed in accordance with paragraph (a) above seriously misleading within the meaning of Section 9-506 of the UCC as in effect in New York or wherever else necessary or appropriate under applicable law, or otherwise impair the perfection of the security interest in the Trust Estate, the Issuer shall give or cause to be given to the Indenture Trustee written notice of any such change and shall file such financing statements or amendments as may be necessary to continue the perfection of the Indenture Trustee’s security interest in the Trust Estate. Neither the Depositor nor the Issuer shall become or seek to become organized under the laws of more than one jurisdiction.

(e) The Issuer shall give the Indenture Trustee written notice at least 60 days prior to any relocation of the Depositor’s or the Issuer’s respective principal executive office or jurisdiction of organization and whether, as a result of such relocation or the relocation of any other applicable Sunrun Party, the applicable provisions of relevant law or the UCC would require the filing of any amendment of any previously filed financing or continuation statement or of any new financing statement and shall file such financing statements or amendments as may be necessary to continue the perfection of the Indenture Trustee’s security interest in the Trust Estate. The Issuer shall at all

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times maintain its principal executive office and jurisdiction of organization within the United States of America.

Section 3.06. Opinions and Officer’s Certificates as to Trust Estate. On the Closing Date and, if requested by the Indenture Trustee, on the date of each supplemental indenture hereto, the Issuer shall furnish to the Indenture Trustee an Opinion of Counsel either stating that, in the opinion of such counsel, such action has been taken with respect to the recording and filing of this Indenture, and indentures supplemental hereto and other requisite documents and with respect to the authorization and filing of any financing statements and continuation statements, as are necessary to perfect and make effective the Lien and security interest in the Trust Estate in favor of the Indenture Trustee for the benefit of the Noteholders, created by this Indenture, subject to Permitted Liens, and reciting the details of such action, or stating that, in the opinion of such counsel, no such action is necessary to make such Lien and security interest effective.

On or before the thirtieth day prior to the fifth anniversary of the Closing Date and every five years thereafter until the Rated Final Maturity, the Issuer (or the Transaction Manager on behalf of the Issuer) shall furnish to the Indenture Trustee an Officer’s Certificate either stating that all actions have been taken with respect to the recording, filing, re-recording and re-filing of this Indenture, any indentures supplemental hereto and any other requisite documents and with respect to the authorization and filing of any financing statements and continuation statements as is necessary to maintain the Lien created by this Indenture with respect to the Trust Estate and reciting the details of such actions or stating that no actions are necessary to maintain such Lien and security interest. The Issuer (or the Transaction Manager on behalf of the Issuer) shall also provide the Indenture Trustee with a file stamped copy of any document or instrument filed as described in such Officer’s Certificate contemporaneously with the delivery of such Officer’s Certificate. Such Officer’s Certificate shall also describe the recording, filing, re-recording and re-filing of this Indenture, any indentures supplemental hereto and any other requisite documents and the authorization and filing of any financing statements and continuation statements that will be required to maintain the Lien of this Indenture with respect to the Trust Estate. If the Officer’s Certificate delivered to the Indenture Trustee hereunder specifies future action to be taken by the Issuer, the Issuer (or the Transaction Manager on behalf of the Issuer) shall furnish a further Officer’s Certificate no later than the time so specified in such former Officer’s Certificate to the effect required hereby.

Section 3.07. Statement as to Compliance. The Issuer will deliver to the Indenture Trustee and the Rating Agency, within 120 days after the end of each fiscal year (beginning with fiscal year 2019), an Officer’s Certificate of the Issuer stating, as to the signer thereof, that, (a) a review of the activities of the Issuer during the preceding calendar year and of its performance under this Indenture has been made under such officer’s supervision, (b) to the best of such officer’s knowledge, based on such review, the Issuer has fulfilled all its obligations under this Indenture throughout such year, or, if there has been a default in the fulfillment of any such obligation that is continuing,

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specifying each such default known to such officer and the nature and status thereof and remedies therefor being pursued, and (c) to the best of such officer’s knowledge, based on such review, no event has occurred and is continuing which is, or after notice or lapse of time or both would become, an Event of Default hereunder or, if such an event has occurred and is continuing, specifying each such event known to him or her and the nature and status thereof and remedies therefor being pursued.

Section 3.08. Recording. The Issuer will, upon the Closing Date and thereafter from time to time, prepare and cause financing statements and such other instruments as may be required with respect thereto, including without limitation, the Financing Statements to be filed, registered and recorded as may be required by present or future law (with file stamped copies thereof delivered to the Indenture Trustee) to create, perfect and protect the Lien hereof upon the Conveyed Property and the other items of the Trust Estate, and protect the validity of this Indenture. The Issuer shall, from time to time, perform or cause to be performed any other act as required by law and shall execute (or authorize, as applicable) or cause to be executed (or authorized, as applicable) any and all further instruments (including financing statements, continuation statements and similar statements with respect to any of said documents with file stamped copies thereof delivered to the Indenture Trustee) that are necessary for such creation, perfection and protection. The Issuer shall pay, or shall cause to be paid, all filing, registration and recording taxes and fees incident thereto, and all expenses, taxes and other governmental charges incident to or in connection with the preparation, execution, authorization, delivery or acknowledgment of the recordable documents, any instruments of further assurance, and the Notes.

Section 3.09. Agreements Not to Institute Bankruptcy Proceedings. The Issuer shall only voluntarily institute any proceedings to adjudicate the Issuer as bankrupt or insolvent, consent to the institution of bankruptcy or insolvency proceedings against the Issuer, file a petition seeking or consenting to reorganization or relief under any applicable federal or State law relating to bankruptcy, consent to the appointment of a receiver, liquidator, assignee, trustee, sequestrator (or other similar official) of the Issuer or a substantial part of its property or admit its inability to pay its debts generally as they become due or authorize any of the foregoing to be done or taken on behalf of the Issuer, in accordance with the terms of the Issuer Operating Agreement.

Section 3.10. Additional Covenants; Covenants with Respect to the Managing Members and Project Companies.

(a) So long as any of the Notes are Outstanding:

(i) The Issuer will keep in full effect its existence, rights and franchises as a limited liability company under the laws of the State of Delaware and will obtain and preserve its qualification to do business in each jurisdiction in which such qualification is or shall be necessary to protect the validity and enforceability of this Indenture, the Notes and each

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asset included in the Trust Estate and to perform its obligations under any of the Transaction Documents to which it is a party.

(ii) The Issuer shall not consolidate or merge with or into any other entity or convey or transfer its properties and assets substantially as an entirety to any entity unless (A) the entity (if other than the Issuer) formed or surviving such consolidation or merger, or that acquires by conveyance or transfer the properties and assets of the Issuer substantially as an entirety, shall be organized and existing under the laws of the United States of America or any State thereof as a special purpose bankruptcy remote entity, and shall expressly assume the obligation to make due and punctual payments of principal and interest on the Notes then Outstanding and the performance of every covenant on the part of the Issuer to be performed or observed pursuant to the Indenture, (B) immediately after giving effect to such transaction, no Default or Event of Default under this Indenture shall have occurred and be continuing, (C) such consolidation, merger, conveyance or transfer would not violate any applicable Designated Transfer Restrictions, (D) the Issuer shall have delivered to the Rating Agency and the Indenture Trustee an Officer’s Certificate of the Issuer and an Opinion of Counsel, each stating that such consolidation, merger, conveyance or transfer complies with this Indenture and (E) the Issuer shall have given prior written notice of such consolidation or merger to the Rating Agency.

(iii) The funds and other assets of the Issuer shall not be commingled with those of any other Person except to the extent expressly permitted under the Transaction Documents.

(iv) The Issuer shall not be, become or hold itself out as being liable for the debts of any other Person.

(v) The Issuer shall not form, or cause to be formed, any subsidiaries.

(vi) The Issuer shall act solely in its own name and through its Authorized Officers or duly authorized officers or agents in the conduct of its business, and shall conduct its business so as not to mislead others as to the identity of the entity with which they are concerned. The Issuer shall not have any employees other than the Authorized Officers of the Issuer.

(vii) The Issuer shall maintain its records and books of account and shall not commingle its records and books of account with the records and books of account of any other Person. The books of the Issuer may be kept (subject to any provision contained in the applicable statutes) inside or outside the State of Delaware at such place or places as may be designated from time to time by the Issuer Operating Agreement.

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(viii) All actions of the Issuer shall be taken by an Authorized Officer of the Issuer (or any Person acting on behalf of the Issuer).

(ix) The Issuer shall not amend its certificate of formation (except as required under Delaware law) or the Issuer Operating Agreement, without first giving prior written notice of such amendment to the Rating Agency (a copy of which shall be provided to the Indenture Trustee).

(x) The Issuer shall not waive, repeal, amend, vary, supplement or otherwise modify any provision of the Issuer Operating Agreement that requires the unanimous written consent of the Issuer’s members and the Independent Manager without the prior written consent of all members and the Independent Manager and shall comply with and cause compliance with the provisions of its certificate of formation and Issuer Operating Agreement.

(xi) The Issuer will maintain the formalities of the form of its organization.

(xii) The annual financial statements of the Sunrun Parties and Sunrun’s consolidated affiliates will disclose the effects of the transactions contemplated by the Transaction Documents in accordance with GAAP. Any consolidated financial statements which consolidate the assets and earnings of any Sunrun Party with those of the Issuer will contain a footnote stating that the assets of the Issuer will not be available to creditors of any other Sunrun Party or any other Person. The financial statements of the Issuer, if any, will disclose that the assets of any other Sunrun Party are not available to pay creditors of the Issuer.

(xiii) Other than certain costs and expenses related to the issuance of the Notes, no Sunrun Party shall (1) obligate itself to pay the Issuer’s expenses, (2) guarantee the Issuer’s obligations or (3) obligate itself to advance funds to the Issuer for payment of expenses except for costs and expenses for which a Sunrun Party other than the Issuer is required to make payments.

(xiv) All business correspondences of the Issuer shall be conducted in the Issuer’s own name.

(xv) Other than as contemplated by the Transaction Documents, no Sunrun Party acts or will act as agent of the Issuer and the Issuer does not and will not act as agent of any other Sunrun Party.

(xvi) The Issuer shall not make any expenditure (by long-term or operating lease or otherwise) for capital assets (either realty or personalty).

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(xvii) The Issuer shall comply with the requirements of all applicable laws, the non-compliance with which would, individually or in the aggregate, materially and adversely affect the ability of the Issuer to perform its obligations under the Notes, this Indenture or any other Transaction Document.

(xviii) The Issuer shall not, directly or indirectly, (A) pay any dividend or make any distribution (by reduction of capital or otherwise), whether in cash, property, securities or a combination thereof, to any owner of a beneficial interest in the Issuer or otherwise with respect to any ownership or equity interest or security in or of the Issuer or to the Transaction Manager or the Transaction Transition Manager, (B) redeem, purchase, retire or otherwise acquire for value any such ownership or equity interest or security or (C) set aside or otherwise segregate any amounts for any such purpose; provided, however, that the Issuer may make, or cause to be made, distributions to the Transaction Manager, the Transaction Transition Manager, its beneficial owners and the Indenture Trustee as permitted by, and to the extent funds are available for such purpose under, this Indenture and the other Transaction Documents. The Issuer will not, directly or indirectly, make payments to or distributions from the Collection Account or any other Account except in accordance with this Indenture and the other Transaction Documents.

(b) So long as any of the Notes remain Outstanding, the Issuer agrees, as the sole member of each Managing Member, that it will:

(i) cause such Managing Member (A) to cause the related Project Company to make all Managing Member Distributions with respect to such Managing Member directly to the Collection Account and (B) to deliver to the Indenture Trustee for deposit into the Collection Account any Managing Member Distributions received by such Managing Member;

(ii) cause such Managing Member to comply with the provisions of its Managing Member LLCA and not to take any action that would cause such Managing Member to violate the provisions of its Managing Member LLCA;

(iii) cause such Managing Member to maintain all material licenses and permits required to carry on its business as now conducted and in accordance with the provisions of the Transaction Documents, except to the extent the failure to do so could not reasonably be expected to have a material adverse effect on the interests of the Noteholders;

(iv) not permit or consent to the admission of any new member of such Managing Member other than a “Special Member” as defined in and in accordance with the provisions of its Managing Member LLCA;

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(v) not make any material amendment to the limited liability company agreement of such Managing Member that could reasonably be expected to have a material adverse effect on the interests of the Noteholders;

(vi) cause such Managing Member to, and cause the related Project Company to (A) comply with the provisions of its Project Company LLCA and (B) not take any action that would violate the provisions of such Project Company LLCA;

(vii) if applicable, cause such Managing Member (A) to comply with and enforce the provisions of the related Tax Loss Insurance Policy, if any, and (B) not to consent to any amendment to the related Tax Loss Insurance Policy, if any, to the extent that such amendment could reasonably be expected to have a material adverse effect on the interests of the Noteholders;

(viii) if applicable, so long as such Managing Member is the managing member of a Project Company, cause such Project Company to comply with and enforce the provisions of the related Tax Loss Insurance Policy, if any;

(ix) so long as such Managing Member is the managing member of a Project Company, cause such Project Company to maintain all material licenses and permits required to carry on its business as now conducted and in accordance with the provisions of the Project Company Documents, except to the extent the failure to do so could not reasonably be expected to have a material adverse effect on the interests of the Noteholders;

(x) not permit such Managing Member to consent to the admission of any new member of the related Project Company other than pursuant to the exercise of the related Purchase Option or otherwise in connection with any transfer by the Tax Equity Investor Member pursuant to the related Project Company Documents;

(xi) cause such Managing Member to not consent to or approve any material amendment to the related Project Company LLCA or other Project Company Document that could reasonably be expected to have a material adverse effect on the interests of the Noteholders except to the extent that any such consent is expressly required pursuant to the terms of the applicable Project Company LLCA;

(xii) cause such Managing Member to direct the Tax Loss Policy Insurers to pay the proceeds of the Master Tax Loss Insurance Policy (other than any such proceeds paid by a Tax Loss Policy Insurer in respect of contest costs) into the Tax Loss Insurance Proceeds Account; and

(xiii) cause the Managing Member with respect to [***] Project Company to deposit into the Collection Account for distribution pursuant to the Priority of Payments an

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amount of any proceeds of the [***] Tax Loss Insurance Policy paid to such Managing Member in accordance with the related Project Company LLCA equal to the lesser of (x) such amount and (y) an amount equal to the aggregate amounts paid to the related Tax Equity Investor Member in respect of such ITC Loss Indemnity through a Limited Step-up Event; provided, that any remaining amounts after giving effect to the payment described in the preceding clauses may be paid at the direction of the Transaction Manager.

Section 3.11. Providing of Notice.

(a) The Issuer, upon learning of any failure on the part of a Sunrun Party to observe or perform in any material respect any covenant, representation or warranty set forth in any Transaction Document to which it is a party, as applicable, which would reasonably be expected to have a material adverse effect on the Issuer, the Trust Estate, the Noteholders or the Notes or upon learning of any Event of Default, Transaction Manager Termination Event, proposed amendment of any Project Company Document which could be material to the Noteholders or resignation or removal of the Operator, shall promptly, and in any event within two (2) Business Days of becoming aware thereof, notify, in writing, the Indenture Trustee and the Depositor of such failure or Event of Default, Transaction Manager Termination Event, proposed material amendment of any Project Company Document or resignation or removal of the Operator.

(b) The Indenture Trustee, upon receipt of written notice by a Responsible Officer thereof of the Performance Guarantor’s failure to perform any covenant or obligation of the Performance Guarantor set forth in the Performance Guaranty, shall promptly notify the Performance Guarantor of such failure in writing.

(c) As soon as possible, and in any event within five (5) Business Days, after the Issuer or any of its ERISA Affiliates knows or has reason to know that an ERISA Event has occurred, the Issuer deliver to the Indenture Trustee a certificate of a Responsible Officer of the Issuer setting forth the details of such ERISA Event, the action that the Issuer or the ERISA Affiliate proposes to take with respect thereto, and, when known, any action taken or threatened by the Internal Revenue Service, Department of Labor or the Pension Benefit Guaranty Corporation.

(d) To the extent any such notice has not been separately provided by a party to the Transaction Documents directly to the Indenture Trustee, the Issuer shall promptly, and in any event within five (5) Business Days, after receipt thereof by the Issuer, deliver to the Indenture Trustee copies of all material notices, requests, and other documents (excluding regular periodic reports) delivered or received by the Issuer under or in connection with the Transaction Documents.

(e) To the extent any such notice has not been separately provided by a party to the Transaction Documents directly to the Indenture Trustee, the Issuer shall promptly, and in any event within five (5) Business Days, after receipt thereof by any the Issuer, deliver to the Indenture Trustee

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Section 3.12. Representations and Warranties of the Issuer. The Issuer hereby represents and warrants to the Indenture Trustee and the Noteholders that as of the Closing Date:

(a) The Issuer is duly formed and is validly existing as a limited liability company in good standing under the laws of the State of Delaware with full power and authority to execute and deliver this Indenture, the Transaction Management Agreement, the Depositor Contribution Agreement, the Custodial Agreement and each other Transaction Document to which it is a party and to perform the terms and provisions hereof and thereof; the Issuer is duly qualified to do business as a foreign business entity in good standing, and has obtained all required licenses and approvals, if any, in all jurisdictions in which the ownership or lease of property or the conduct of its business requires such qualifications except those jurisdictions in which failure to be so qualified would not have a material adverse effect on the business or operations of the Issuer, the Trust Estate, the Noteholders or the Conveyed Property.

(b) All necessary action has been taken by the Issuer to authorize the Issuer, and the Issuer has full power and authority, to execute, deliver and perform its obligations under this Indenture, the Transaction Management Agreement, the Depositor Contribution Agreement, the Custodial Agreement and each other Transaction Document to which it is a party, and no consent or approval of any Person is required for the execution, delivery or performance by the Issuer of this Indenture, the Transaction Management Agreement, the Depositor Contribution Agreement, the Custodial Agreement and each other Transaction Document to which it is a party.

(c) This Indenture, the Transaction Management Agreement, the Depositor Contribution Agreement, the Custodial Agreement and each other Transaction Document to which it is a party have been duly executed and delivered, and the execution and delivery of this Indenture, the Transaction Management Agreement, the Depositor Contribution Agreement, the Custodial Agreement and each other Transaction Document to which it is a party by the Issuer and its performance and compliance with the terms hereof and thereof will not violate its certificate of formation or the Issuer Operating Agreement or constitute a default (or an event which, with notice or lapse of time, or both, would constitute a default) under, or result in the breach of, any material contract or any other material agreement or instrument (including, without limitation, the Transaction Documents) to which the Issuer is a party or which may be applicable to the Issuer or any of its assets.

(d) This Indenture, the Transaction Management Agreement, the Depositor Contribution Agreement, the Custodial Agreement and each other Transaction Document to which it is a party constitute valid, legal and binding obligations of the Issuer, enforceable against it in accordance
with their respective terms, subject to applicable bankruptcy, insolvency, reorganization, moratorium and other similar laws affecting the enforcement of creditors’ rights generally and to general principles of equity (regardless of whether enforcement is sought in a proceeding at law or in equity).

(e) The Issuer is not in violation of, and the execution, delivery and performance of this Indenture, the Transaction Management Agreement, the Depositor Contribution Agreement, the Custodial Agreement and each other Transaction Document to which it is a party by the Issuer will not constitute a violation with respect to, any order or decree of any court or any order, regulation or demand of any federal, State, municipal or governmental agency, which violation might have consequences that would materially and adversely affect the condition (financial or other) or operations of the Issuer or its properties or might have consequences that would materially affect the performance of its duties hereunder or thereunder.

(f) No proceeding of any kind, including but not limited to litigation, arbitration, judicial or administrative, is pending or, to the Issuer’s knowledge, threatened against or contemplated by the Issuer which could reasonably be expected to have a material adverse effect on the execution, delivery, performance or enforceability of this Indenture, the Notes or any other Transaction Document.

(g) None of the assets of the Issuer are or will be subject to Title I of ERISA, Section 4975 of the Code, or, by reason of any investment in the Issuer by any governmental plan, as the case may be, any other federal, state, or local provision similar to Section 406 of ERISA or Section 4975 of the Code. Neither the Issuer nor any of its ERISA Affiliates has maintained, participated or had any liability in respect of any Plan during the past six (6) years which could reasonably be expected to subject the Issuer or any of its ERISA Affiliates to any tax, penalty or other liabilities. With respect to any Plan which is a Multi-Employer Plan, no such Multi-Employer Plan shall be in “insolvent,” as defined in Title IV ERISA, in each case, if the insolvent status continues unremedied for thirty (30) days. No ERISA Event has occurred or is reasonably likely to occur.

(h) Each of the representations and warranties of the Issuer set forth in the Transaction Management Agreement, the Depositor Contribution Agreement, the Issuer Operating Agreement and each other Transaction Document to which it is a party is, as of the Closing Date, true and correct in all material respects.

(i) There are no ongoing breaches or defaults under the Transaction Documents or any of the Project Company Documents by the Issuer or any of its affiliates or, to its Knowledge, any of the other parties to the Transaction Documents or Project Company Documents.

(j) The Issuer has not incurred debt or engaged in activities not related to the transactions contemplated hereunder except as permitted by the Issuer Operating Agreement or Section 3.04.

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(k) The Issuer is not insolvent and will not become insolvent as a result of the Grant pursuant to this Indenture; the Issuer is not engaged and is not about to engage in any business or transaction for which any property remaining with the Issuer is unreasonably small capital or for which the remaining assets of the Issuer are unreasonably small in relation to the business of the Issuer or the transaction; the Issuer does not intend to incur, and does not believe or reasonably should not have believed that it would incur, debts beyond its ability to pay as they become due; and the Issuer has not made a transfer or incurred an obligation and does not intend to make such a transfer or incur such an obligation with actual intent to hinder, delay or defraud any entity to which the Issuer was or became, on or after the date that such transfer was made or such obligation was incurred, indebted.

(l) The proceeds from the issuance of the Notes will be used by the Issuer to (i) pay the Depositor the purchase price for the Depositor Conveyed Property pursuant to the Depositor Contribution Agreement, (ii) pay certain expenses incurred in connection with the issuance of the Notes and (iii) make the required deposits into the Liquidity Reserve Account, the Supplemental Reserve Account and the Collection Account. The Depositor will distribute the portion of the proceeds from the sale of the Notes received from the Issuer under clause (i) above to Sunrun Athena Investor, who will distribute such proceeds to Sunrun Athena Holdco, who will distribute such proceeds to Sunrun, which will use such proceeds to simultaneously prepay prior financing arrangements of its subsidiaries and to obtain releases of all assets securing such financing arrangements that will form part of the Trust Estate.

(m) (i) The transfers of the Conveyed Property pursuant to the Contribution Agreements are absolute transfers for legal purposes, (ii) the Grant of the Trust Estate by the Issuer pursuant to the terms of this Indenture is a pledge for financial accounting purposes and U.S. federal income tax purposes, and (iii) the Notes will be treated by the Issuer as indebtedness for U.S. federal income tax purposes unless otherwise required by applicable law. In this regard, (i) the financial statements of Sunrun and its consolidated subsidiaries will show (A) that the Conveyed Property is owned by such consolidated group and (B) that the Notes are indebtedness of the consolidated group (and will contain footnotes describing the transfer to the Issuer and the pledge to the Indenture Trustee for the benefit of the Noteholders), and (ii) the U.S. federal income tax returns of Sunrun and its consolidated subsidiaries will indicate that the Notes are indebtedness unless otherwise required by applicable law.

(n) The Issuer has timely filed all federal, state, provincial, territorial, foreign and other Tax returns and reports required to be filed under applicable law, and has timely paid all material federal, state, foreign and other Taxes levied or imposed upon it or its properties, income or assets otherwise due and payable, except those which are being contested in good faith by appropriate actions diligently conducted and for which adequate reserves have been provided in accordance with GAAP. No Lien or similar adverse claim has been filed, and no claim is being asserted, with

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respect to any such Tax due from the Issuer or with respect to the Conveyed Property or the assignments thereto. Any Taxes due and payable by the Issuer or its predecessors in interest in connection with the execution and delivery of this Indenture and the other Transaction Documents and the transfers and transactions contemplated hereby or thereby have been paid or shall have been paid if and when due. The Issuer is not liable for Taxes payable by any other Person.

(o) As of the Cut-Off Date, the Aggregate Discounted Solar Asset Balance is approximately $547,232,907 and the Securitization Share of DSAB of all Solar Assets is approximately $445,391,015.

(p) The legal name of the Issuer is as set forth in the introductory paragraph to this Indenture; the Issuer has no trade names, fictitious names, assumed names or “doing business as” names.

(q) The Issuer has not taken any action or failed to take any action that could cause it to be treated as an association taxable as a corporation for U.S. federal income tax purposes.

(r) No item comprising the Conveyed Property has been sold, transferred, assigned or pledged by the Issuer to any Person other than the Indenture Trustee; immediately prior to the pledge of the Conveyed Property to the Indenture Trustee pursuant to this Indenture, the Issuer was the sole owner thereof and had good and indefeasible title thereto, free of any Lien other than Permitted Liens.

(s) Upon (i) the filing of the Perfection UCCs in accordance with applicable law and (ii) the delivery to the Indenture Trustee of the certificates evidencing the limited liability company interests in the Managing Member, together with instruments of transfer, the Indenture Trustee, for the benefit of the Noteholders, shall have a first priority perfected security interest in the Conveyed Property and in the proceeds thereof, limited with respect to proceeds to the extent set forth in Section 9-315 of the UCC as in effect in the applicable jurisdiction, subject to Permitted Liens. All filings (including, without limitation, UCC filings) and other actions as are necessary in any jurisdiction to provide third parties with notice of and to perfect the transfer and assignment of the Trust Estate to the Issuer and to give the Indenture Trustee a first perfected security interest in the Trust Estate (subject to Permitted Liens) and the payment of any fees, have been made or, with respect to Termination Statements, will be made within one Business Day of the Closing Date.

(t) None of the absolute transfers of the Conveyed Property pursuant to the Contribution Agreements or the Grant by the Issuer to the Indenture Trustee pursuant to this Indenture is subject to the bulk transfer or any similar statutory provisions in effect in any applicable jurisdiction.

(u) The Issuer is not and, immediately after giving effect to the offering and sale of the Notes and the application of the proceeds thereof as described in the Offering Circular, will not be required to register as an “investment company” as such term is defined in Section 3(a)(1) of the

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1940 Act and is not relying on Section 3(c)(1) or Section 3(c)(7) of the 1940 Act. The Issuer is being structured so as not to constitute a “covered fund” for purposes of Section 619 of the Dodd Frank Wall Street Reform and Consumer Protection Act of 2010, based on its current interpretations.

(v) The principal place of business and the chief executive office of the Issuer are located in the State of California and the jurisdiction of organization of the Issuer is the State of Delaware, and there are no other such locations.

(w) None of the Sunrun Parties or any of their affiliates, nor to the knowledge of the Sunrun Parties, any of their respective officers, directors or employees, appears on the Specially Designated Nationals and Blocked Persons List published by the Office of Foreign Assets Control (“OFAC”) or is otherwise a person with which any U.S. person is prohibited from dealing under the laws of the United States, unless authorized by OFAC. None of the Sunrun Parties conducts business or completes transactions with the governments of any country subject to comprehensive economic sanctions, or persons subject to specific economic sanctions, in each case as administered and enforced by OFAC. None of the Sunrun Parties will directly or indirectly use the proceeds from the issuance of the Notes, or lend, contribute or otherwise make available such proceeds to any subsidiary, joint venture partner or other person to fund any activities of or business with any person that, at the time of such funding, is subject to comprehensive or specific economic sanctions administered or enforced by OFAC, or is in any country or territory that, at the time of such funding or facilitation, is subject to comprehensive or specific economic sanctions administered or enforced by OFAC. None of the Sunrun Parties is in violation of Executive Order No. 13224 or the Patriot Act.

(x) None of the Sunrun Parties or any of their affiliates nor, to the knowledge of the Sunrun Parties, any of their respective directors, officers, employees or agents, shall use any of the proceeds of the sale of the Notes (i) for any unlawful contribution, gift, entertainment or other unlawful expense relating to political activity, (ii) to make any direct or indirect unlawful payment to any government official or employee from corporate funds, (iii) to violate any provision of the U.S. Foreign Corrupt Practices Act of 1977 or similar anti-corruption law to which they are lawfully subject, or (iv) to make any unlawful bribe, rebate, payoff, influence payment, kickback or other unlawful payment.

(y) Representations and warranties regarding the security interest and Custodian Files, in each case, made as of the Closing Date:

(i) The Grant contained in the “Granting Clause” of this Indenture creates a valid and continuing security interest (as defined in the applicable UCC) in the Conveyed Property in favor of the Indenture Trustee, which security interest is prior to all other Liens arising under the UCC (other than Permitted Liens), and is enforceable as such against creditors of the Issuer, subject to applicable bankruptcy, insolvency, fraudulent conveyance,

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reorganization, moratorium and similar laws affecting creditors’ rights and remedies generally, and to general principles of equity (regardless of whether enforcement is sought in a proceeding at law or in equity).

(ii) The Issuer has taken all steps necessary to perfect its ownership interest in 100% of the Managing Member Membership Interests.

(iii) The limited liability company interest in each Managing Member constitutes “investment property” within the meaning of the UCC.

(iv) The Issuer owns and has good and marketable title to the Depositor Conveyed Property free and clear of any Lien, claim or encumbrance of any Person, other than Permitted Liens.

(v) The Issuer has caused or will have caused, within ten days of the Closing Date, the filing of all appropriate financing statements in the proper filing office in the appropriate jurisdictions under applicable law in order to perfect the security interest in the Conveyed Property granted to the Indenture Trustee hereunder.

(vi) The Issuer has caused or will have caused, within ten days of the Closing Date, the filing of all appropriate financing statements in the proper filing office in the appropriate jurisdictions under applicable law in order to perfect the security interest in the Conveyed Property granted to the Indenture Trustee hereunder.

(vii) Other than the security interest granted to the Indenture Trustee pursuant to this Indenture, the Issuer has not pledged, assigned, sold, granted a security interest in, or otherwise conveyed any portion of the Trust Estate. The Issuer has not authorized the filing of and is not aware of any financing statements against the Issuer that include a description of collateral covering any portion of the Trust Estate other than any financing statement relating to the security interest granted to the Indenture Trustee hereunder or that have been terminated. The Issuer is not aware of any judgment or tax lien filings against the Issuer.

(viii) The Issuer has taken all action required on its part for control (as defined in Section 8-106 of the UCC) to have been obtained by the Indenture Trustee on behalf of the Noteholders over the limited liability company interests in each Managing Member with respect to which such control may be obtained pursuant to the UCC. No person other than the Indenture Trustee on behalf of the Noteholders has control or possession of all or any part of the limited liability company interests in the Managing Members. Without limiting the foregoing, all certificates evidencing the limited liability company interests in the Managing Members in existence on the date hereof have been delivered to the Indenture Trustee on behalf of the Noteholders.

41

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The foregoing representations and warranties in Section 3.12(y)(i)-(viii) shall remain in full force and effect and shall not be waived or amended until the Notes are paid in full or otherwise released or discharged.

Section 3.13. Representations and Warranties of the Indenture Trustee. The Indenture Trustee hereby represents and warrants to the Rating Agency and the Noteholders that as of the Closing Date:

(a) The Indenture Trustee has been duly organized and is validly existing as a national banking association;

(b) The Indenture Trustee has full power and authority and legal right to execute, deliver and perform its obligations under this Indenture and each other Transaction Document to which it is a party and has taken all necessary action to authorize the execution, delivery and performance by it of this Indenture and each other Transaction Document to which it is a party;

(c) This Indenture and each other Transaction Document to which it is a party have been duly executed and delivered by the Indenture Trustee and constitute the legal, valid, and binding obligations of the Indenture Trustee, enforceable against the Indenture Trustee in accordance with their respective terms, except as such enforceability may be limited by applicable bankruptcy, reorganization, insolvency, liquidation, moratorium, fraudulent conveyance, or similar laws affecting creditors’ or creditors of banks’ rights and/or remedies generally or by general principles of equity (regardless of whether such enforcement is sought in a proceeding in equity or at law);

(d) The execution, delivery and performance of this Indenture and each other Transaction Document to which it is a party by the Indenture Trustee will not constitute a violation with respect to any order or decree of any court or any order, regulation or demand of any federal, State, municipal or governmental agency binding on the Indenture Trustee or such of its property which is material to it, which violation might have consequences that would materially and adversely affect the performance of its duties under this Indenture;

(e) The execution, delivery and performance of this Indenture and each other Transaction Document to which it is a party by the Indenture Trustee do not require any approval or consent of any Person, do not conflict with the Articles of Association and Bylaws of the Indenture Trustee, and do not and will not conflict with or result in a breach which would constitute a material default under any agreement applicable to it or such of its property which is material to it; and

(f) No proceeding of any kind, including but not limited to litigation, arbitration, judicial or administrative, is pending or, to the Indenture Trustee’s knowledge, threatened against or contemplated by the Indenture Trustee which would have a reasonable likelihood of having an adverse effect on the execution, delivery, performance or enforceability of this Indenture or any other Transaction Document to which it is a party by or against the Indenture Trustee.

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Section 3.14. Rule 144A Information. So long as any of the Notes are outstanding, and the Issuer is not subject to Section 13 or 15(d) of the Exchange Act, upon the request of a Noteholder, the Issuer shall promptly furnish at such Noteholder’s expense to such Noteholder, and the prospective purchasers designated by such Noteholder, Rule 144A Information in order to permit compliance with Rule 144A under the Securities Act in connection with the resale of such Notes by such Noteholder.

Section 3.15. Knowledge. Any references herein to the knowledge, discovery or learning of the Issuer or the Transaction Manager shall mean and refer to actual knowledge of an Authorized Officer of the Issuer or the Transaction Manager, as applicable.

Section 3.16. Capital Contributions. Nothing herein shall prevent any direct or indirect member of the Issuer from making capital contributions to the Issuer, a Managing Member or a Project Company, which capital contribution shall be effected directly by such direct or indirect member to the Issuer, the applicable Managing Member or the applicable Project Company, and the Lien of this Indenture shall not attach to any such capital contribution.

ARTICLE IV
MANAGEMENT, ADMINISTRATION AND SERVICING

Section 4.01. Transaction Management Agreement.

(a) The Transaction Management Agreement, duly executed counterparts of which have been delivered to the Indenture Trustee, sets forth the covenants and obligations of the Transaction Manager with respect to the Trust Estate and other matters addressed in the Transaction Management Agreement, and reference is hereby made to the Transaction Management Agreement for a detailed statement of said covenants and obligations of the Transaction Manager thereunder. The Issuer agrees that the Indenture Trustee, in its name or (to the extent required by law) in the name of the Issuer, shall, if so directed and indemnified by the Majority Noteholders of the Controlling Class, enforce all rights of the Issuer under the Transaction Management Agreement for and on behalf of the Noteholders whether or not the Issuer is in default hereunder.

(b) Promptly following a request from the Indenture Trustee (acting at the direction of the Majority Noteholders of the Controlling Class) to do so, the Issuer shall take all such lawful action as the Indenture Trustee may request to compel or secure the performance and observance by the Transaction Manager of each of its obligations to the Issuer and with respect to the Trust Estate under or in connection with the Transaction Management Agreement, in accordance with the terms thereof, and in effecting such request shall exercise any and all rights, remedies, powers and privileges lawfully available to the Issuer under or in connection with the Transaction Management Agreement to the extent and in the manner directed by the Indenture Trustee, including, without limitation, the transmission of notices of default on the part of the Transaction Manager thereunder.

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and the institution of legal or administrative actions or proceedings to compel or secure performance by the Transaction Manager of each of its obligations under the Transaction Management Agreement.

(c) The Issuer shall not waive any default by the Transaction Manager under the Transaction Management Agreement if the effect thereof would adversely affect the Holders of the Notes without the written consent of the Indenture Trustee (which shall be given at the written direction of the Majority Noteholders of the Controlling Class).

(d) The Indenture Trustee does not assume any duty or obligation of the Issuer under the Transaction Management Agreement, and the rights given to the Indenture Trustee thereunder are subject to the provisions of Article VII.

(e) With respect to the Transaction Manager’s obligations under Section 4.3 of the Transaction Management Agreement, the Indenture Trustee shall not have any responsibility to the Issuer, the Transaction Manager or any party hereunder to make any inquiry or investigation as to, and shall have no obligation in respect of, the terms of any engagement of the Independent Service Providers by the Transaction Manager; provided, however that the Indenture Trustee shall be authorized, upon receipt of written direction from the Transaction Manager directing the Indenture Trustee, to execute any acknowledgment or other agreement with the Independent Service Provider required for the Indenture Trustee to receive any of the reports or instructions provided for herein, which acknowledgment or agreement may include, among other things, (i) acknowledgement that the Transaction Manager has agreed that the procedures to be performed by the Independent Service Providers are sufficient for the Issuer’s purposes, (ii) acknowledgment that the Indenture Trustee has agreed that the procedures to be performed by the Independent Service Providers are sufficient for the Indenture Trustee’s purposes and that the Indenture Trustee’s purposes is limited solely to receipt of the report, (iii) releases by the Indenture Trustee (on behalf of itself and the Noteholders) of claims against the Independent Service Providers and acknowledgement of other limitations of liability in favor of the Independent Service Providers, and (iv) restrictions or prohibitions on the disclosure of information or documents provided to it by such firm of Independent Service Providers (including to the Noteholders). Notwithstanding the foregoing, in no event shall the Indenture Trustee be required to execute any agreement in respect of the Independent Service Providers that the Indenture Trustee determines adversely affects it in its individual capacity or which is in a form that is not reasonably acceptable to the Indenture Trustee.

(f) In the event such Independent Service Providers require the Indenture Trustee or the Transaction Transition Manager to agree to the procedures to be performed by such Independent Service Providers in any of the reports required to be prepared pursuant to Section 4.01(e), the Transaction Manager shall direct the Indenture Trustee or the Transaction Transition Manager in writing to so agree; it being understood and agreed that the Indenture Trustee or the Transaction Transition Manager will deliver such letter of agreement in conclusive reliance upon the direction.

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of the Transaction Manager, and the Indenture Trustee or the Transaction Transition Manager has not made any independent inquiry or investigation as to, and shall have no obligation or liability in respect of, the sufficiency, validity or correctness of such procedures. Neither the Indenture Trustee nor the Transaction Transition Manager shall be liable for any claims, liabilities or expenses relating to such Independent Service Providers’ engagement or any report issued in connection with such engagement, and the dissemination of any such report is subject to the written consent of the Independent Service Providers.

ARTICLE V

ACCOUNTS, COLLECTIONS, PAYMENTS OF INTEREST AND PRINCIPAL, RELEASES, AND STATEMENTS TO NOTEHOLDERS

Section 5.01. Accounts.

(a) On or prior to the Closing Date, the Issuer shall cause the Indenture Trustee to establish and maintain in the name of the Indenture Trustee, for the benefit of the Noteholders, four Eligible Accounts: (i) a collection account in which Managing Member Distributions, on the Closing Date, the Collection Account Closing Date Deposit, and certain other amounts will be deposited from time to time (the “Collection Account”), (ii) a supplemental reserve account in which the Supplement Reserve Account Initial Deposit will be deposited on the Closing Date and the Supplemental Reserve Account Deposit will be deposited from time to time (the “Supplemental Reserve Account”), (iii) a liquidity reserve account in which amounts necessary to maintain the Liquidity Reserve Account Required Deposit will be deposited from time to time (the “Liquidity Reserve Account”), and (iv) a tax loss insurance proceeds account in which all proceeds of a Tax Loss Insurance Policy received by the Indenture Trustee with respect to any Tax Loss Indemnity will be deposited from time to time (the “Tax Loss Insurance Proceeds Account”), in each case, bearing a designation that the funds deposited therein are held for the benefit of the Noteholders. Each of the Collection Account, the Supplemental Reserve Account, the Liquidity Reserve Account and the Tax Loss Insurance Proceeds Account will initially be established with the Indenture Trustee.

(b) Funds on deposit in the Collection Account, the Supplemental Reserve Account and the Liquidity Reserve Account shall be invested by the Indenture Trustee (or any custodian with respect to funds on deposit in any such account) in Eligible Investments selected in writing by the Transaction Manager (pursuant to standing instructions or otherwise). All such Eligible Investments shall be held by or on behalf of the Indenture Trustee for the benefit of the Noteholders.

(c) All investment earnings pursuant to Section 5.01(b) of moneys deposited into the Collection Account, the Supplemental Reserve Account and the Liquidity Reserve Account shall be deposited (or caused to be deposited) by the Indenture Trustee into the Collection Account, and any loss resulting from such investments shall be charged to such Account. No investment of any

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amount held in any of the Collection Account, the Supplemental Reserve Account and the Liquidity Reserve Account shall mature later than the Business Day immediately preceding the Payment Date which is scheduled to occur immediately following the date of investment. The Transaction Manager, on behalf of the Issuer, will not direct the Indenture Trustee to make any investment of any funds held in any of the Accounts unless the security interest Granted and perfected in such account will continue to be perfected in such investment, in either case without any further action by any Person.

(d) The Indenture Trustee shall not in any way be held liable by reason of any insufficiency in any of the Accounts resulting from any loss on any Eligible Investment included therein except for losses attributable to the Indenture Trustee’s failure to follow instructions of the Issuer in accordance with Section 5.01, negligence or bad faith, or its failure to make payments on such Eligible Investments issued by the Indenture Trustee, in its commercial capacity as principal obligor and not as Indenture Trustee, in accordance with their terms.

(e) Funds on deposit in any Account shall remain uninvested if (i) the Transaction Manager shall have failed to give investment directions in writing for any funds on deposit in any Account to the Indenture Trustee by 1:00 p.m. Eastern time (or such other time as may be agreed by the Transaction Manager and the Indenture Trustee) on any Business Day; or (ii) based on the actual knowledge of, or receipt or written notice by, a Responsible Officer of the Indenture Trustee, a Default or Event of Default shall have occurred and be continuing with respect to the Notes but the Notes shall not have been declared due and payable, or, if such Notes shall have been declared due and payable following an Event of Default, amounts collected or receivable from the Trust Estate are being applied as if there had not been such a declaration.

(f) [Reserved].

(g) (i) The Indenture Trustee shall possess all right, title and interest in all funds on deposit from time to time in the Accounts and in all proceeds thereof (including, without limitation, all investment earnings on the Accounts) and all such funds, investments, proceeds and income shall be part of the Trust Estate. Except as otherwise provided herein, the Accounts shall be under the control (as defined in Section 9-104 of the UCC to the extent such account is a deposit account and Section 8-106 of the UCC to the extent such account is a securities account) of the Indenture Trustee for the benefit of the Noteholders. If, at any time, any of the Accounts ceases to be an Eligible Account, the Indenture Trustee (or the Transaction Manager on its behalf) shall within five Business Days establish a new Account as an Eligible Account and shall transfer any cash and/or any investments to such new Account. In connection with the foregoing, the Transaction Manager agrees that, in the event that any of the Accounts are not accounts with the Indenture Trustee, the Transaction Manager shall notify the Indenture Trustee in writing promptly upon any of such Accounts ceasing to be an Eligible Account.

46

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(ii) With respect to the Account Property, the Indenture Trustee agrees that:

(A) any Account Property that is held in deposit accounts shall be held solely in Eligible Accounts; and, except as otherwise provided herein, each such Eligible Account shall be subject to the exclusive custody and control of the Indenture Trustee, and the Indenture Trustee shall have sole signature authority with respect thereto;

(B) any Account Property that constitutes physical property shall be delivered to the Indenture Trustee in accordance with paragraph (i)(A) or (i)(B), as applicable, of the definition of “Delivery” and shall be held, pending maturity or disposition, solely by the Indenture Trustee or a securities intermediary (as such term is defined in Section 8-102(a)(14) of the UCC) acting solely for the Indenture Trustee;

(C) any Account Property that is a book-entry security held through the Federal Reserve System pursuant to federal book-entry regulations shall be delivered in accordance with paragraph (1)(c) or (1)(e), as applicable, of the definition of “Delivery” and shall be maintained by the Indenture Trustee, pending maturity or disposition, through continued book-entry registration of such Account Property as described in such paragraph;

(D) any Account Property that is an “uncertificated security” under Article 8 of the UCC and that is not governed by clause (C) above shall be delivered to the Indenture Trustee in accordance with paragraph (i)(D) of the definition of “Delivery” and shall be maintained by the Indenture Trustee, pending maturity or disposition, through continued registration of the Indenture Trustee’s (or its nominee’s) ownership of such security;

(E) the Transaction Manager shall have the power, revocable by the Indenture Trustee upon the occurrence of a Transaction Manager Termination Event, to instruct the Indenture Trustee to make withdrawals and payments from the Accounts for the purpose of permitting the Transaction Manager and the Indenture Trustee to carry out their respective duties hereunder; and

(F) any Account held by it hereunder shall be maintained as a “securities account” as defined in the Uniform Commercial Code as in effect in New York (the “New York UCC”), and that it shall be acting as a “securities intermediary” for the Indenture Trustee itself as the “entitlement holder” (as defined in Section 8-102(a)(7) of the New York UCC) with respect to each such Account. The parties hereto agree that each Account shall be governed by the laws of the State of New York, and

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regardless of any provision in any other agreement, the “securities intermediary’s jurisdiction” (within the meaning of Section 8-110 of the New York UCC) shall be the State of New York. The Indenture Trustee acknowledges and agrees that (1) each item of property (whether investment property, financial asset, security, instrument or cash) credited to the Accounts shall be treated as a “financial asset” within the meaning of Section 8-102(a)(9) of the New York UCC and (2) notwithstanding anything to the contrary, if at any time the Indenture Trustee shall receive any order from the Indenture Trustee (solely in its capacity as securities intermediary) directing transfer or redemption of any financial asset relating to the Accounts, the Indenture Trustee shall comply with such entitlement order without further consent by the Issuer, or any other person. In the event of any conflict of any provision of this Section 5.01(g)(ii)(F) with any other provision of this Indenture or any other agreement or document, the provisions of this Section 5.01(g)(ii)(F) shall prevail.

Section 5.02. Supplemental Reserve Account and Tax Loss Insurance Proceeds Account. (i) On the Closing Date, the Issuer shall deliver to the Indenture Trustee an amount equal to the Supplemental Reserve Account Closing Date Deposit for deposit into the Supplemental Reserve Account. On each Payment Date, to the extent of Available Funds and in accordance with and subject to the Priority of Payments, the Indenture Trustee shall, based on the Quarterly Transaction Report, deposit into the Supplemental Reserve Account an amount equal to the Supplemental Reserve Account Deposit until the amount on deposit equals the Supplemental Reserve Account Required Balance.

(ii) The Indenture Trustee shall release funds from the Supplemental Reserve Account to pay the following amounts upon direction from the Transaction Manager set forth in an Officer’s Certificate (no more than once per calendar month); provided that if the amount available in the Supplemental Reserve Account is less than all such amounts, the Indenture Trustee shall release such funds in the following order of priority:

(A) the costs (inclusive of labor costs) of replacement of (a) any inverter or energy storage device that no longer has the benefit of a manufacturer warranty or (b) any communication device and for which (i) the Operator is not obligated under the related MOMA to cover the replacement costs of such communication device, inverter or energy storage device (or if so obligated, fails to pay such costs), for the purpose of funding a loan by the Managing Member to the related Project Company to pay for the replacement of such communication device, inverter or energy storage device (or, if such a loan would not be permitted under the applicable Project Company LLCA, the Managing Member shall provide such amount in the form of an additional capital contribution to the Project Company) or (ii) the Transaction Manager in its role as Operator has paid under the related MOMA;

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(B) the true-up payment of each of [***] Project Company and [***] Project Company, when due and payable to the applicable Tax Equity Investor Member; and

(C) once each of the final true-up payments for [***] Project Company and [***] Project Company have been made, to or at the direction of the Issuer the greater of (x) the difference between $[***] and all amounts paid with respect to clause (B) above, and (y) $0.

(iii) If the amount on deposit in the Supplemental Reserve Account exceeds the Supplemental Reserve Account Required Balance on any Payment Date, the amount of such excess will be transferred to the Collection Account for distribution as part of Available Funds pursuant to the Priority of Payments.

(iv) The Indenture Trustee shall transfer to the Collection Account all amounts on deposit in the Supplemental Reserve Account on the earlier of the Rated Final Maturity and the acceleration of the Notes following an Event of Default.

(b) Notwithstanding Section 5.02(a)(i), upon the Rating Agency Condition being satisfied, in lieu of or in substitution for moneys otherwise required to be deposited to the Supplemental Reserve Account, the Issuer (or the Transaction Manager on behalf of the Issuer) may deliver or cause to be delivered to the Indenture Trustee a Letter of Credit issued by an Eligible Letter of Credit Bank in an amount equal to the Supplemental Reserve Account Required Balance; provided that any Supplemental Reserve Account Deposit required to be made after the replacement of amounts on deposit in the Supplemental Reserve Account with the Letter of Credit shall be made in deposits to the Supplemental Reserve Account as provided in the Priority of Payments or pursuant to an increase in the Letter of Credit, or addition of another Letter of Credit (such increase or addition to require satisfaction of the Rating Agency Condition). The Letter of Credit shall be held as an asset of the Supplemental Reserve Account and valued for purposes of determining the amount on deposit in the Supplemental Reserve Account as the amount then available to be drawn on such Letter of Credit. Any references in the Transaction Documents to amounts on deposit in the Supplemental Reserve Account shall include the value of the Letter of Credit unless specifically excluded. If the amounts on deposit in the Supplemental Reserve Account are represented by a Letter of Credit, the Indenture Trustee shall be required to submit the drawing documents to the Eligible Letter of Credit Bank to draw the full stated amount of the Letter of Credit and deposit the proceeds therefrom in the Supplemental Reserve Account in the following circumstances: (i) if the Indenture Trustee is directed by the Transaction Manager on behalf of the Issuer, pursuant to an Officer’s Certificate, to withdraw funds from the Supplemental Reserve Account for any reason; (ii) if the Letter of Credit is scheduled to expire in accordance with its terms and has not been extended or replaced with a Letter of Credit issued by an Eligible Letter of Credit Bank by the date that is ten days prior to the expiration date; or (iii) if the Indenture Trustee is directed by the Issuer,

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the Transaction Manager or the Majority Noteholders of the Controlling Class, pursuant to an Officer’s Certificate stating that the financial institution issuing the Letter of Credit ceases to be an Eligible Letter of Credit Bank. Any drawing on the Letter of Credit may be reimbursed by the Issuer only from amounts remitted to the Issuer pursuant to clauses (x) or (xi) of the Priority of Payments.

(c) The Indenture Trustee shall deposit into the Tax Loss Insurance Proceeds Account upon receipt all Master Tax Loss Insurance Proceeds received by it, as applicable, with respect to any ITC Loss Indemnity.

(d) At the direction of the Transaction Manager pursuant to an Officer’s Certificate, the Indenture Trustee shall (i) pay applicable amounts on deposit in the Tax Loss Insurance Proceeds Account (x) to the related Project Company for distribution by such Project Company to its members in accordance with the terms of the related Project Company LLC Agreement, (y) directly to the applicable Tax Equity Investor Member in the amount of the applicable ITC Loss Indemnity or (z) to the Project Company to pay the taxes owed, so as to resolve such ITC Loss Indemnity and (ii) once the applicable ITC Loss Indemnity has been paid in full (as determined by the Transaction Manager), the Indenture Trustee shall (A) deposit into the Collection Account for distribution pursuant to the Priority of Payments an amount of any remaining Master Tax Loss Insurance Proceeds paid to the related Managing Member equal to the lesser of (1) such remaining amount and (2) the aggregate amounts paid to the related Tax Equity Investor Member in respect of such ITC Loss Indemnity through a Limited Step-up Event and (B) pay any remaining amounts after giving effect to clause (A) at the written direction of the Transaction Manager.

(e) To the extent not refundable to the applicable Tax Loss Policy Insurer(s), so long as the applicable ITC Loss Indemnity has been paid in full (as determined by the Transaction Manager), the Indenture Trustee shall transfer to the Collection Account all amounts on deposit in the Tax Loss Insurance Proceeds Account on the earlier of the Rated Final Maturity or the acceleration of the Notes following an Event of Default.

Section 5.03 Liquidity Reserve Account.

(a) On the Closing Date, the Issuer shall deliver to the Indenture Trustee an amount equal to the Liquidity Reserve Account Required Balance with respect to the Closing Date for deposit into the Liquidity Reserve Account. As described in the Priority of Payments, to the extent of Available Funds, the Indenture Trustee shall, on each Payment Date, deposit Available Funds into the Liquidity Reserve Account until the amount on deposit therein shall equal the Liquidity Reserve Account Required Balance.

(b) On each Payment Date, the Indenture Trustee shall, based on the Quarterly Transaction Report, transfer funds on deposit in the Liquidity Reserve Account to the Collection

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Account to the extent the amount on deposit in the Collection Account as of such Payment Date is less than the amounts necessary to make the distributions described in clauses (i) through (iv) of Section 5.05(a). Based on the Quarterly Transaction Report, (i) if the amount on deposit in the Liquidity Reserve Account exceeds the Liquidity Reserve Account Required Balance on any Payment Date during a Regular Amortization Period, the amount of such excess will be transferred to the Supplemental Reserve Account, and (ii) if the amount on deposit in the Supplemental Reserve Account exceeds the Supplemental Reserve Account Required Balance on such Payment Date, the amount of such excess will be transferred to the Collection Account and will be part of Available Funds distributed pursuant to the Priority of Payments. Based on the Quarterly Transaction Report, if the amount on deposit in the Liquidity Reserve Account exceeds the Liquidity Reserve Account Required Balance on any Payment Date during an Early Amortization Period or Sequential Interest Amortization Period, the amount of such excess will be transferred to the Collection Account and will be part of the Available Funds distributed pursuant to the Priority of Payments.

(c) Upon the earliest of (i) the Rated Final Maturity, (ii) the acceleration of the Notes following an Event of Default and (iii) the Payment Date on which the sum of Available Funds and the amount on deposit in the Liquidity Reserve Account is greater than or equal to the sum of (1) the payments and distributions required under clauses (i) through (iv) of the Priority of Payments, (2) the Aggregate Outstanding Note Balance as of such Payment Date prior to any distributions made on such Payment Date, and (3) all other Issuer Secured Obligations then due, the Indenture Trustee shall, based on the information set forth in the related Quarterly Transaction Report, withdraw any remaining funds on deposit in the Liquidity Reserve Account (including investment earnings or income) and deposit such funds into the Collection Account. On the Termination Date, the Indenture Trustee shall, based on the information set forth in the related Quarterly Transaction Report, withdraw any remaining funds on deposit in the Liquidity Reserve Account (including investment earnings or income) and pay such amount to the Issuer.

(d) Notwithstanding Section 5.03(a), upon the Rating Agency Condition being satisfied, in lieu of or in substitution for moneys otherwise required to be deposited to the Liquidity Reserve Account, the Issuer (or the Transaction Manager on behalf of the Issuer) may deliver or cause to be delivered to the Indenture Trustee a Letter of Credit issued by an Eligible Letter of Credit Bank in an amount equal to the Liquidity Reserve Account Required Balance; provided that any deposit into the Liquidity Reserve Account required to be made after the replacement of amounts on deposit in the Liquidity Reserve Account with the Letter of Credit shall be made in deposits to the Liquidity Reserve Account as provided in the Priority of Payments or pursuant to an increase in the Letter of Credit, or addition of another Letter of Credit (such increase or addition to require satisfaction of the Rating Agency Condition). The Letter of Credit shall be held as an asset of the Liquidity Reserve Account and valued for purposes of determining the amount on deposit in the Liquidity Reserve Account as the amount then available to be drawn on such Letter of Credit. Any references in the Transaction Documents to amounts on deposit in the Liquidity Reserve Account shall include the

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value of the Letter of Credit unless specifically excluded. If the amounts on deposit in the Liquidity Reserve Account are represented by a Letter of Credit, the Indenture Trustee shall be required to submit the drawing documents to the Eligible Letter of Credit Bank to draw the full stated amount of the Letter of Credit and deposit the proceeds therefrom in the Liquidity Reserve Account in the following circumstances: (i) if the Indenture Trustee is directed by the Transaction Manager on behalf of the Issuer, pursuant to an Officer’s Certificate, to withdraw funds from the Liquidity Reserve Account for any reason; (ii) if the Letter of Credit is scheduled to expire in accordance with its terms and has not been extended or replaced with a Letter of Credit issued by an Eligible Letter of Credit Bank by the date that is ten days prior to the expiration date; or (iii) if the Indenture Trustee is directed by the Issuer, the Transaction Manager or the Majority Noteholders of the Controlling Class, pursuant to an Officer’s Certificate stating that the financial institution issuing the Letter of Credit ceases to be an Eligible Letter of Credit Bank. Any drawing on the Letter of Credit may be reimbursed by the Issuer only from amounts remitted to the Issuer pursuant to clauses (x) or (xi) of the Priority of Payments.

Section 5.04. Collection Account.

(a) On or prior to the Closing Date, the Transaction Manager, on behalf of the Issuer as owner of each Managing Member, shall have instructed each Managing Member to direct the related Project Company to pay all Managing Member Distributions to the Collection Account. The Issuer shall cause all other amounts required to be deposited therein pursuant to the Transaction Documents, to be deposited within two Business Days of receipt thereof. The Indenture Trustee shall provide or make available electronically (or upon written request, by first class mail or facsimile) monthly statements on all amounts received in the Collection Account to the Issuer and the Transaction Manager.

(b) The Transaction Manager will be entitled to be reimbursed from amounts on deposit in the Collection Account with respect to a Collection Period for amounts previously deposited in the Collection Account but later determined by the Transaction Manager to have resulted from mistaken deposits or postings or checks returned for insufficient funds. The amount to be reimbursed hereunder shall be paid to the Transaction Manager on the related Payment Date upon certification by the Transaction Manager of such amounts; provided, however, that the Transaction Manager must provide such certification within six months of such mistaken deposit, posting or returned check.

(c) The Indenture Trustee shall make distributions from the Collection Account as directed by the Transaction Manager in accordance with the Transaction Management Agreement.

Section 5.03. Distribution of Funds in the Collection Account.

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(a) On each Payment Date, Available Funds on deposit in the Collection Account shall be distributed by the Indenture Trustee, based solely on the information set forth in the related Quarterly Transaction Report, in the following order and priority of payments (the “Priority of Payments”):

(i) (a) to the Indenture Trustee, (1) the Indenture Trustee Fee and any accrued and unpaid Indenture Trustee Fees with respect to prior Payment Dates plus (2) out-of-pocket expenses and indemnities of the Indenture Trustee incurred and not reimbursed in connection with its obligations and duties under this Indenture, (b) to the Transaction Transition Manager (1) the Transaction Transition Manager Fee and any accrued and unpaid Transaction Transition Manager Fees with respect to prior Payment Dates, (2) Transaction Transition Manager Expenses and (3) any accrued and unpaid transition costs payable to the Transaction Transition Manager, and (c) to the Custodian, (1) the Custodian Fee and any accrued and unpaid Custodian Fees with respect to prior Payment Dates plus (2) out-of-pocket expenses and indemnities of the Custodian incurred and not reimbursed in connection with its obligations and duties under the Custodial Agreement; provided that payments to the Indenture Trustee as reimbursement for clause (a)(2), to the Transaction Transition Manager as reimbursement for clause (b)(2) and to the Custodian as reimbursement for clause (c)(2) will be limited to $100,000 in the aggregate per calendar year as long as no Event of Default has occurred, and the Notes have not been accelerated, or the Trust Estate sold, pursuant to this Indenture; provided, further, that the payments to the Transaction Transition Manager as reimbursement for clause (b)(3) will be limited to $75,000 per transition occurrence and $150,000 in the aggregate;

(ii) to the Transaction Manager, the Transaction Manager Fee, plus any accrued and unpaid Transaction Manager Fees with respect to prior Payment Dates;

(iii) to the Class A Noteholders, the Class A Note Interest for such Payment Date;

(iv) to the Class B Noteholders, the Class B Note Interest for such Payment Date;

(v) to the Liquidity Reserve Account, an amount equal to the greater of (a) (1) the Liquidity Reserve Account Required Balance minus (2) the amount on deposit in the Liquidity Reserve Account on such Payment Date and (b) $0;

(vi) to the Supplemental Reserve Account, an amount equal to the Supplemental Reserve Account Deposit until the Supplemental Reserve Account Required Balance has been met;

(vii) to the Noteholders: (a) during a Regular Amortization Period, in the following order: (1) to the Class A Noteholders, the Class A Scheduled Note Principal Payment for such Payment Date, (2) to the Class B Noteholders, the Class B Scheduled Note Principal

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Payment for such Payment Date (which will be $0), (3) to the Class A Noteholders, the Unscheduled Note Principal Payment for such
Payment Date until the Outstanding Note Balance of the Class A Notes has been reduced to zero, (4) to the Class B Noteholders, any
Unscheduled Note Principal Payment for such Payment Date remaining after payment to the Class A Noteholders until the Outstanding
Note Balance of the Class B Notes has been reduced to zero and (5) to the Class B Noteholders, any unpaid Deferred Interest on the
Class B Notes; and (b) during an Early Amortization Period or Sequential Interest Amortization Period, all remaining Available Funds
shall be distributed in the following order: (1) to the Class A Noteholders until the Outstanding Note Balance of the Class A Notes has
been reduced to zero and (2) to the Class B Noteholders in the following order: (A) to reduce the Outstanding Note Balance of the Class
B Notes to zero and (B) to pay any unpaid Deferred Interest on the Class B Notes;

(viii) (a) to the Class A Noteholders, the Class A Additional Principal Amount for such Payment Date until the Outstanding
Note Balances of the Class A Notes have been reduced to zero; and (b) to the Class B Noteholders, the Class B Additional Principal
Amount for such Payment Date until the Outstanding Note Balance of the Class B Notes has been reduced to zero;

(ix) to the Indenture Trustee, the Transaction Transition Manager and the Custodian, any incurred and not reimbursed out-of-
pocket expenses and indemnities of the Indenture Trustee and the Custodian and Transaction Transition Manager Expenses, in each case
to the extent not paid in accordance with (i) above;

(x) to the Letter of Credit Bank or other party as directed by the Transaction Manager (a) any fees and expenses related to the
Letter of Credit and (b) any amounts which have been drawn under the Letter of Credit and any interest due thereon; and

(xi) to or at the direction of the Issuer, any remaining Available Funds on deposit in the Collection Account.

Section 5.06. Early Amortization Period Payments and Sequential Interest Amortization Period Payments. Any distributions of principal
made during an Early Amortization Period or a Sequential Interest Amortization Period will be allocated in the following manner to determine
any unpaid amounts on future Payment Dates: first, to the Scheduled Note Principal Payment calculated for such Payment Date; and second, to
the Unscheduled Note Principal Payment amount calculated for such Payment Date.

Section 5.07. Note Payments.

(a) The Indenture Trustee shall pay from amounts on deposit in the Collection Account in accordance with the Quarterly Transaction
Report and Section 5.05 to each Noteholder of record
as of the related Record Date either (i) by wire transfer, in immediately available funds to the account of such Noteholder at a bank or other entity having appropriate facilities therefor, if such Noteholder shall have provided to the Indenture Trustee appropriate written instructions at least five Business Days prior to related Payment Date (which instructions may remain in effect for subsequent Payment Dates unless revoked by such Noteholder), or (ii) if not, by check mailed to such Noteholder at the address of such Noteholder appearing in the Note Register, the amounts to be paid to such Noteholder pursuant to such Noteholder’s Notes; provided, that so long as the Notes are registered in the name of the Securities Depository such payments shall be made to the nominee thereof in immediately available funds.

(b) In the event that any withholding Tax is imposed on the Issuer’s payment (or allocations of income) to a Noteholder, such withholding Tax shall reduce the amount otherwise distributable to the Noteholder in accordance with this Section 5.07. The Indenture Trustee is hereby authorized and directed to retain from amounts otherwise distributable to the Noteholders any applicable withholding Taxes in accordance with applicable law. The Transaction Manager shall instruct the Indenture Trustee of any withholding Tax that is legally owed by the Issuer in respect of the Issuer’s payment to a Noteholder (or the nominee, if the Notes are registered in the name of the Securities Depositary), in writing in a Quarterly Transaction Report. Nothing herein shall prevent the Indenture Trustee from contesting at the expense of the applicable Noteholder any such withholding Tax in appropriate proceedings, and withholding payment of such withholding Tax, if permitted by law, pending the outcome of such proceedings. The amount of any withholding Tax imposed with respect to a Noteholder shall be treated as cash distributed to such Noteholder at the time it is withheld by the Issuer or the Indenture Trustee (at the direction of the Transaction Manager or the Issuer) and remitted to the appropriate taxing authority. In the event that a Noteholder wishes to apply for a refund of any such withholding Tax, the Indenture Trustee shall reasonably cooperate with such Noteholder in making such claim so long as such Noteholder agrees to reimburse the Indenture Trustee for any out-of-pocket expenses incurred.

(c) Each Noteholder and each Note Owner, by its acceptance of its Note, will be deemed to have consented to the provisions of Section 5.05(a) relating to the Priority of Payments.

(d) For purposes of U.S. federal income, state and local income and franchise taxes, each Noteholder and each Note Owner, by its acceptance of its Note, will be deemed to have agreed to, and hereby instructs the Indenture Trustee to, (i) treat the Notes as indebtedness unless otherwise required by applicable law, and (ii) treat the Grant of the Trust Estate by the Issuer to the Indenture Trustee pursuant to this Indenture as a pledge.

(e) Each Noteholder and each Note Owner, by its acceptance of such Note or such beneficial interest in such Note, will be deemed to have agreed to provide the Indenture Trustee or the Issuer or other applicable withholding agent with the Noteholder Tax Identification Information and the Noteholder FATCA Information. In addition, each Noteholder and each Note Owner will

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be deemed to have agreed that the Indenture Trustee (or other applicable withholding agent) has the right to withhold FATCA Withholding Tax from any amount of interest or other amounts (without any corresponding gross-up) payable to a Noteholder or Note Owner that fails to comply with the foregoing requirements provided that such amounts are properly remitted to the appropriate taxing authority. The Issuer hereby covenants with the Indenture Trustee that, upon request from the Indenture Trustee, the Issuer will provide the Indenture Trustee with information that is reasonably available to the Issuer so as to enable the Indenture Trustee to determine whether or not the Indenture Trustee is obliged to make any withholding, including FATCA Withholding Tax, in respect of any payments with respect to a Note (and if applicable, to provide the necessary detailed information that is reasonably available to the Issuer to effectuate any withholding, including FATCA Withholding Tax).

Section 5.08. Statements to Noteholders; Tax Returns. Within 30 days after the end of each calendar year, the Indenture Trustee shall furnish to each Person who at any time during such calendar year was a Noteholder of record and received any payment thereon (a) a report as to the aggregate of amounts paid during such calendar year to each such Noteholder allocable to principal, interest or other amounts for such calendar year or applicable portion thereof during which such Person was a Noteholder and (b) such information required by the Code, to enable such Noteholders to prepare their U.S. federal and state income tax returns. The obligation of the Indenture Trustee set forth in this paragraph shall be deemed to have been satisfied to the extent that information shall be provided by the Indenture Trustee, in the form of Form 1099 or other comparable form, pursuant to any requirements of the Code.

The Indenture Trustee shall have no responsibility or liability with respect to reporting or calculation of original issue discount with respect to the Notes. Upon written request from the Noteholders to the Indenture Trustee for any information with respect to original issue discount accruing on the Notes, the Issuer will promptly supply to the Indenture Trustee any such information for further distributions to the Noteholders.

The Issuer shall cause the Transaction Manager, at the Transaction Manager’s expense, to cause a firm of Independent Service Providers to prepare any tax returns required to be filed by the Issuer. The Indenture Trustee, upon reasonable written request, shall furnish the Issuer with all such information in the possession of the Indenture Trustee as may be reasonably required in connection with the preparation of any tax return of the Issuer.

Section 5.09. Reports by Indenture Trustee. Within five Business Days after the end of each Collection Period, the Indenture Trustee shall provide or make available electronically (or upon written request, by first class mail or facsimile) to the Transaction Manager a written report setting forth the amounts in the Collection Account, the Liquidity Reserve Account, the Tax Loss Insurance Proceeds Account and the Supplemental Reserve Account, and the identity of the investments included therein. Without limiting the generality of the foregoing, the Indenture Trustee

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shall, upon the written request of the Transaction Manager, promptly transmit or make available electronically to the Transaction Manager, copies of all accountings of, and information with respect to, the Collection Account, the Liquidity Reserve Account, the Tax Loss Insurance Proceeds Account and the Supplemental Reserve Account, investments thereof, and payments thereto and therefrom.

Section 5.10. Final Balances. Upon payment of all principal and interest with regard to the Notes, all other amounts due to the Noteholders as expressly provided for in the Transaction Documents and payment of all reasonable fees, charges and other expenses, such as fees and expenses of the Indenture Trustee, all moneys remaining in all Accounts, except moneys necessary to make payments equal to such amounts and payments of principal and interest with respect to the Notes, which moneys shall be held and disbursed by the Indenture Trustee pursuant to this Article V, shall be, subject to applicable escheatment laws, remitted to, or at the direction of, the Issuer.

ARTICLE VI

VOLUNTARY PREPAYMENT OF NOTES, OPTIONAL REDEMPTION OF THE NOTES AND RELEASE OF COLLATERAL

Section 6.01. Voluntary Prepayment.

(a) Each Class of Notes are subject to prepayment, in whole or in part (such prepayment, a “Voluntary Prepayment”), prior to its Rated Final Maturity, at the option of the Issuer on any Business Day, upon (i) delivery to the Indenture Trustee and the Transaction Manager, not less than 15 days prior to the date fixed for the proposed prepayment (the “Voluntary Prepayment Date”), of a Notice of Prepayment from the Issuer stating the Issuer’s election to prepay the Notes or portion thereof in the form attached hereto as Exhibit C-1, and (ii) the deposit by the Issuer into the Collection Account, in the case of any Voluntary Prepayment in whole, no later than 11:00 a.m. Eastern time on such Voluntary Prepayment Date, or in the case of any Voluntary Prepayment in part, no later than 12:00 p.m. Eastern time on the Business Day prior to such Voluntary Prepayment Date, of an amount equal to the sum of (i) the outstanding principal balance of the Notes to be prepaid, (ii) all accrued and unpaid interest thereon (including any Deferred Interest), (iii) all amounts owed to the Indenture Trustee, the Transaction Manager, the Transaction Transition Manager, the Custodian and any other parties to the Transaction Documents, and (iv) with respect to the Class A Notes, the Make Whole Amount or Call Premium, if applicable (the “Prepayment Amount”). On the specified Voluntary Prepayment Date, provided that the Indenture Trustee has received the Prepayment Amount, in the case of any Voluntary Prepayment in whole, no later than 11:00 a.m. Eastern time on such Voluntary Prepayment Date, or in the case of any Voluntary Prepayment in part, no later than 12:00 p.m. Eastern time on the Business Day prior to such specified Voluntary Prepayment Date, the Indenture Trustee shall (x) withdraw the Prepayment Amount from the Collection Account and disburse such amounts in accordance with clauses (i) through (v) of the Priority of Payments and then to the Noteholders, the Make Whole Amount or Call Premium, if applicable, and then (i)

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if no Sequential Interest Amortization Period is then in effect, to pay down the Notes on a pro rata basis, and (ii) if a Sequential Interest Amortization Period is then in effect, first to pay down the Class A Notes until the Outstanding Note Balance of the Class A Notes has been reduced to zero, and then to pay down the Class B Notes until the Outstanding Note Balance of the Class B Notes has been reduced to zero and (y) to the extent the Outstanding Note Balance is prepaid, release any remaining assets in the Trust Estate to, or at the direction of, the Issuer. Notwithstanding the foregoing, the Issuer has the right to voluntarily prepay the Class B Notes in whole or in part without making a pro rata prepayment of the Class A Notes.

(b) If a Voluntary Prepayment Date with respect to the Class A Notes occurs prior to the Call Premium Determination Date, the Issuer shall pay the Class A Noteholders the Make Whole Amount. If a Voluntary Prepayment Date with respect to the Class A Notes occurs on or after the Call Premium Determination Date but prior to the Make Whole Determination Date, the Issuer shall pay the Class A Noteholders the Call Premium but will not be required to pay such Noteholders the Make Whole Amount. No Make Whole Amount or Call Premium shall be due to the Noteholders if a Voluntary Prepayment is made on or after the Make Whole Determination Date. No Make Whole Amount or Call Premium is payable with respect to the Class B Notes.

(c) If the Issuer elects to rescind the Voluntary Prepayment, it must give written notice of such determination to the Indenture Trustee at least two Business Days prior to the Voluntary Prepayment Date. If a redemption of the Notes has been rescinded pursuant to this Section 6.01(c), the Indenture Trustee shall provide notice of such rescission to the registered owner of each Note which had been subject to the rescinded redemption at the address shown on the Note Register maintained by the Note Registrar with copies to the Issuer, the Transaction Manager and the Rating Agency.

Section 6.02. Optional Redemption.

(a) The Notes are subject to redemption, in whole but not in part (an “Optional Redemption”), prior to their respective Rated Final Maturity, at the option of the Issuer on any date on or after the Payment Date when the Outstanding Note Balance of the Class A Notes is 20% or less of the aggregate Initial Outstanding Note Balance of the Class A Notes (after giving effect to any payments on such date), upon (i) delivery to the Indenture Trustee, not less than 15 days prior to the date fixed for the proposed redemption (the “Optional Redemption Date”), of a Notice of Redemption from the Issuer stating the Issuer’s election to redeem the Notes in the form attached hereto as Exhibit C-2, and (ii) the deposit by the Issuer into the Collection Account on or prior to such Optional Redemption Date, to the extent of any shortfall therein, in the following order of priority, an amount equal to the sum of (A) the Note Interest due on such Optional Redemption Date, (B) the Outstanding Note Balance, and (C) all fees, expenses and known indemnities due on such Optional Redemption Date, including the fees, expenses and known indemnities of or due to the Indenture Trustee, the Transaction Transition Manager, the Custodian and the Transaction Manager. On the specified

58
Optional Redemption Date, provided that the Indenture Trustee has received such amounts on or prior to such specified Optional Redemption Date, the Indenture Trustee shall (x) make the final payment in full to the Noteholders as described herein and in the order of priority set forth above, (y) pay to the appropriate parties all fees, expenses and known indemnities then due and (z) release any remaining assets in the Trust Estate to, or at the direction of, the Issuer. No Make Whole Amount or Call Premium will be due in connection with a prepayment of the Notes pursuant to an Optional Redemption.

(b) If the Indenture Trustee does not receive such amounts on or prior to the specified Optional Redemption Date, such redemption shall be deemed automatically rescinded and the Noteholders shall receive the payments of interest and principal as if such option to redeem had never been exercised.

(c) If the Issuer elects to rescind the Optional Redemption, it must give written notice of such determination to the Indenture Trustee at least two Business Days prior to the Optional Redemption Date. If a redemption of the Notes has been rescinded pursuant to this Section 6.02(c), the Indenture Trustee shall provide notice of such rescission to the registered owner of each Note which had been subject to the rescinded redemption at the address shown on the Note Register maintained by the Note Registrar with copies to the Issuer, the Transaction Manager and the Rating Agency.

Section 6.03. Notice of Voluntary Prepayment; Notice of Redemption. Any Notice of Voluntary Prepayment or Notice of Redemption shall be given by the Indenture Trustee by mailing a copy of the notice of prepayment by first-class mail (postage prepaid) not less than 10 days and not more than 15 days prior to the date fixed for prepayment to the registered owner of each Note to be prepaid at the address shown on the Note Register maintained by the Note Registrar with copies to the Issuer, the Transaction Manager and the Rating Agency. Failure to give or receive such notice of prepayment by mailing to any Noteholder, or any defect therein, shall not affect the validity of any proceedings for the prepayment of other Notes. If a Voluntary Prepayment or Optional Redemption has been rescinded pursuant to Section 6.01(c) or Section 6.02(c), as applicable, and to the extent the Indenture Trustee had provided notice of the Voluntary Prepayment or Optional Redemption, the Indenture Trustee shall provide notice of such rescission to the registered owner of each Note which had been subject to the rescinded Voluntary Prepayment or Optional Redemption, as applicable, at the address shown on the Note Register maintained by the Note Registrar with copies to the Issuer, the Transaction Manager and the Rating Agency.

Any notice mailed as provided in this Section 6.03 shall be conclusively presumed to have been duly given, whether or not the registered owner of such Notes receives the notice.

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Section 6.04. Cancellation of Notes. All Notes which have been paid in full or retired or received by the Indenture Trustee for exchange shall not be reissued but shall be canceled and destroyed in accordance with its customary procedures.

Section 6.05. Release of Collateral. The Indenture Trustee shall, on or after the Termination Date, release any remaining portion of the Trust Estate from the Lien created by this Indenture and shall deposit in the Collection Account any funds then on deposit in any other Account. The Indenture Trustee shall release property from the Lien created by this Indenture pursuant to this Section 6.05 only upon receipt by the Indenture Trustee of an Issuer Order accompanied by an Officer’s Certificate and an Opinion of Counsel described in Section 314(c)(2) of the Trust Indenture Act of 1939, as amended, and meeting the applicable requirements of Section 12.02.

ARTICLE VII

THE INDENTURE TRUSTEE

Section 7.01. Duties of Indenture Trustee.

(a) If a Responsible Officer of the Indenture Trustee has received notice pursuant to Section 7.02(a), or a Responsible Officer of the Indenture Trustee shall otherwise have actual knowledge that an Event of Default has occurred and is continuing, the Indenture Trustee shall exercise such of the rights and powers vested in it by this Indenture, and use the same degree of care and skill in its exercise, as a prudent person would exercise or use under the circumstances in the conduct of his own affairs.

(b) Except during the occurrence and continuance of such an Event of Default:

   (i) The Indenture Trustee need perform only those duties that are specifically set forth in this Indenture and any other Transaction Document to which it is a party and no others and no implied covenants or obligations of the Indenture Trustee shall be read into this Indenture or any other Transaction Document.

   (ii) In the absence of negligence or bad faith on its part, the Indenture Trustee may conclusively rely, as to the truth of the statements and the correctness of the opinions expressed therein, upon certificates or opinions furnished to the Indenture Trustee and conforming to the requirements of this Indenture or any other Transaction Document. The Indenture Trustee shall, however, examine such certificates and opinions to determine whether they conform on their face to the requirements of this Indenture or any other Transaction Document but the Indenture Trustee shall not be required to determine, confirm or recalculate information contained in such certificates or opinions.

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(c) No provision of this Indenture shall be construed to relieve the Indenture Trustee from liability for its own negligent action, its own negligent failure to act, or its own willful misconduct, except that:

(i) This paragraph does not limit the effect of subsection (b) of this Section 7.01.

(ii) The Indenture Trustee shall not be liable in its individual capacity for any action taken or error of judgment made in good faith by a Responsible Officer or other officers of the Indenture Trustee, unless it is proved that the Indenture Trustee was negligent in ascertaining the pertinent facts.

(iii) The Indenture Trustee shall not be personally liable with respect to any action it takes, suffers or omits to take in good faith in accordance with a direction received by it from the Noteholders in accordance with this Indenture or any other Transaction Document or for any action taken, suffered or omitted by it in good faith and believed by it to be authorized or within the discretion or rights or powers conferred upon it by this Indenture or any other Transaction Document.

(iv) The Indenture Trustee shall have no responsibility for filing any financing or continuation statement in any public office at any time or otherwise to perfect or to maintain the perfection of any security interest in the Trust Estate or in any item comprising the Conveyed Property.

(d) No provision of this Indenture or any other Transaction Document shall require the Indenture Trustee to expend or risk its own funds or otherwise incur any financial or other liability in the performance of any of its duties hereunder or thereunder, or in the exercise of any of its rights or powers, if it shall have reasonable grounds for believing that repayment of such funds or adequate indemnity against such risk or liability is not assured to it.

(e) The provisions of subsections (a), (b), (c) and (d) of this Section 7.01 shall apply to any co-trustee or separate trustee appointed by the Issuer and the Indenture Trustee pursuant to Section 7.13.

(f) The Indenture Trustee shall not in any way be held liable by reason of any insufficiency in any Account held by the Indenture Trustee resulting from any loss experienced on any item comprising the Conveyed Property.

(g) In no event shall the Indenture Trustee be required to take any action that conflicts with applicable law, any of the provisions of this Indenture or any other Transaction Document or with the Indenture Trustee’s duties hereunder or that adversely affect its rights and immunities hereunder.

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(h) In no event shall the Indenture Trustee have any obligations or duties under or have any liabilities whatsoever to Noteholders under ERISA.

(i) The Indenture Trustee shall not make any direct or indirect transfer of the Managing Member Membership Interests except in compliance with the Designated Transfer Restrictions and the Acknowledgements (as determined by the Majority Noteholders of the Controlling Class).

(j) In no event shall the Indenture Trustee be responsible or liable for any failure or delay in the performance of its obligations hereunder arising out of or caused by, directly or indirectly, forces beyond its control and without the fault or negligence of the Indenture Trustee, including, without limitation, strikes, work stoppages, acts of war or terrorism, civil or military disturbances, nuclear or natural catastrophes or acts of God, and interruptions, loss or malfunctions of utilities; it being understood that the Indenture Trustee shall resume performance as soon as practicable under the circumstances.

Section 7.02. Notice of Default, Transaction Manager Termination Event or Event of Default; Delivery of Manager Reports.

(a) The Indenture Trustee shall not be required to take notice of or be deemed to have notice or knowledge of any default, Default, Transaction Manager Termination Event, Event of Default event or information, or be required to act upon any default, Default, Transaction Manager Termination Event, Event of Default, event or information (including the sending of any notice) unless a Responsible Officer of the Indenture Trustee is specifically notified in writing at the address set forth in Section 12.04 or until a Responsible Officer of the Indenture Trustee shall have acquired actual knowledge of a default, Default, a Transaction Manager Termination Event, an Event of Default, an event or information and shall have no duty to take any action to determine whether any such default, Default, Transaction Manager Termination Event, Event of Default, or event has occurred. In the absence of receipt of such notice or actual knowledge, the Indenture Trustee may conclusively assume that there is no such default, Default, Event of Default, Transaction Manager Termination Event or event. If written notice of the existence of a default, a Default, an Event of Default, a Transaction Manager Termination Event, an event or information has been delivered to a Responsible Officer of the Indenture Trustee or a Responsible Officer of the Indenture Trustee has actual knowledge thereof, the Indenture Trustee shall promptly provide paper or electronic notice thereof to the Issuer, the Transaction Transition Manager, the Rating Agency and each Noteholder, but in any event, no later than five days after such knowledge or notice occurs.

(b) In the event the Transaction Manager does not make available to the Rating Agency all reports of the Transaction Manager and all reports to the Noteholders, upon request of the Rating Agency, the Indenture Trustee shall make available promptly after such request, copies of such Manager reports as are in Indenture Trustee’s possession to the Rating Agency and the Noteholders.

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Section 7.03. Rights of Indenture Trustee.

(a) The Indenture Trustee may rely and shall be protected in acting or refraining from acting upon any document believed by it to be genuine and to have been signed or presented by the proper Person. The Indenture Trustee need not investigate any fact or matter stated in any document. The Indenture Trustee need not investigate or re-calculate, evaluate, certify, verify or independently determine the accuracy of any numerical information, report, certificate, information, statement, representation or warranty or any fact or matter stated in any such document and may conclusively rely as to the truth of the statements and the accuracy of the information therein.

(b) Before the Indenture Trustee takes any action or refrains from taking any action under this Indenture or any other Transaction Document, it may require an Officer’s Certificate of the Issuer or an Opinion of Counsel, the costs of which (including the Indenture Trustee’s reasonable attorney’s fees and expenses) shall be paid by the party requesting that the Indenture Trustee act or refrain from acting. The Indenture Trustee shall not be liable for any action it takes or omits to take in good faith in reliance on such Officer’s Certificate or Opinion of Counsel.

(c) The Indenture Trustee shall not be personally liable for any action it takes or omits to take or any action or inaction it believes in good faith to be authorized or within its rights or powers.

(d) The Indenture Trustee shall not be bound to make any investigation into the facts of matters stated in any reports, certificates, payment instructions, opinion, notice, order or other paper or document unless requested in writing by 25% or more of the Noteholders, and such Noteholders have provided to the Indenture Trustee indemnity satisfactory to it.

(e) The Indenture Trustee may execute any of the trusts or powers hereunder or perform any duties hereunder either directly or by or through agents or attorneys or a custodian or nominee, and the Indenture Trustee shall not be responsible for any misconduct or negligence on the part of any such agent, attorney, custodian or nominee appointed by it hereunder with due care. The Indenture Trustee may consult with counsel, accountants and other experts and the advice or opinion of counsel, accountants and other experts with respect to legal and other matters relating to any Transaction Document shall be full and complete authorization and protection from liability with respect to any action taken, omitted or suffered by it hereunder in good faith and in accordance with such advice or opinion of counsel.

(f) The Indenture Trustee shall not be required to give any bond or surety with respect to the execution of this Indenture or the powers granted hereunder.

(g) The Indenture Trustee shall not be liable for any action or inaction of the Issuer, the Transaction Manager, the Custodian or any other party (or agent thereof) to this Indenture or any Transaction Document and may assume compliance by such parties with their obligations under

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this Indenture or any other Transaction Document, unless a Responsible Officer of the Indenture Trustee shall have received written notice to
the contrary at the Corporate Trust Office of the Indenture Trustee.

(h) The Indenture Trustee shall be under no obligation to exercise any of the trusts or powers vested in it by this Indenture or to
institute, conduct or defend any litigation hereunder or in relation hereto at the request, order or direction of any of the Noteholders, pursuant to
the provisions of this Indenture, unless such Noteholders shall have offered to the Indenture Trustee security or indemnity satisfactory to the
Indenture Trustee against the costs, expenses and liabilities (including the fees and expenses of the Indenture Trustee’s counsel and agents)
which may be incurred therein or thereby.

(i) The Indenture Trustee shall have no duty (i) to maintain or monitor any insurance or (ii) to see to the payment or discharge of any
tax, assessment, or other governmental charge or any lien or encumbrance of any kind owing with respect to, assessed or levied against, any
part of the Trust Estate.

(j) Delivery of any reports, information and documents to the Indenture Trustee provided for herein or any other Transaction
Document is for informational purposes only (unless otherwise expressly stated), and the Indenture Trustee’s receipt of such or otherwise
publicly available shall not constitute actual or constructive knowledge or notice of any information contained therein or determinable from
information contained therein, including the Transaction Manager’s or the Issuer’s compliance with any of its representations, warranties or
covenants hereunder (as to which the Indenture Trustee is entitled to rely exclusively on Officer’s Certificates). The Indenture Trustee shall not
have actual notice of any default or any other matter unless a Responsible Officer of the Indenture Trustee receives actual written notice of such
default or other matter.

(k) The Indenture Trustee does not have any obligation to investigate any matter or exercise any powers vested under this Indenture
unless requested in writing by 25% or more of the Noteholders.

(l) Knowledge of the Indenture Trustee shall not be attributed or imputed to Wells Fargo’s other roles in the transaction and
knowledge of the Transaction Transition Manager or the Custodian shall not be attributed or imputed to each other or to the Indenture Trustee
(other than those where the roles are performed by the same group or division within Wells Fargo or otherwise share the same Responsible
Officers), or any affiliate, line of business, or other division of Wells Fargo (and vice versa).

(m) The right of the Indenture Trustee to perform any permissive or discretionary act enumerated in this Indenture or any related
document shall not be construed as a duty.

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Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.
Section 7.04. Not Responsible for Recitals, Issuance of Notes or Application of Moneys as Directed. The recitals contained herein and in the Notes, except the certificates of authentication on the Notes, shall be taken as the statements of the Issuer, and the Indenture Trustee assumes no responsibility for their correctness. The Indenture Trustee makes no representations with respect to the Trust Estate or as to the validity or sufficiency of the Trust Estate or this Indenture or any other Transaction Document or of the Notes. The Indenture Trustee shall not be accountable for the use or application by the Issuer of the proceeds of the Notes. Subject to Section 7.01(b), the Indenture Trustee shall not be liable to any Person for any money paid to the Issuer upon an Issuer Order, Transaction Manager instruction or order or direction provided in a Quarterly Transaction Report contemplated by this Indenture or any other Transaction Document.

Section 7.05. May Hold Notes. The Indenture Trustee or any agent of the Issuer, in its individual or any other capacity, may become the owner or pledgee of Notes and may otherwise deal with the Issuer or Sunrun or any Affiliate of the Issuer or Sunrun with the same rights it would have if it were not Indenture Trustee or other agent.

Section 7.06. Money Held in Trust. The Indenture Trustee shall be under no liability for interest on any money received by it hereunder except as otherwise agreed with the Issuer and except to the extent of income or other gain on investments which are obligations of the Indenture Trustee hereunder.

Section 7.07. Compensation and Reimbursement.

(a) The Issuer agrees:

(i) to pay the Indenture Trustee, in accordance with and subject to the Priority of Payments, the Indenture Trustee Fee. The Indenture Trustee’s compensation shall not be limited by any law with respect to compensation of a trustee of an express trust and the payments to the Indenture Trustee provided by Article V hereto shall constitute payments due with respect to the applicable fee agreement or letter;

(ii) in accordance with and subject to the Priority of Payments, to reimburse the Indenture Trustee upon request for all reasonable expenses, disbursements and advances incurred or made by the Indenture Trustee in accordance with any provision of this Indenture (including, but not limited to, the reasonable compensation, expenses and disbursements of its agents and counsel and allocable costs of in house counsel); provided, however, in no event shall the Issuer pay or reimburse the Indenture Trustee or the agents or counsel, including in house counsel of either, for any expenses, disbursements and advances incurred or made by the Indenture Trustee in connection with any negligent action or negligent inaction or willful misconduct on the part of the Indenture Trustee;

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(iii) to indemnify the Indenture Trustee and its officers, directors, employees and agents for, and to hold them harmless against, any fee, loss, liability, damage, cost or expense (including reasonable attorneys’ fees and expenses and court costs) incurred without negligence or bad faith on the part of the Indenture Trustee, to the extent such matters have been determined by a court of competent jurisdiction, arising out of, or in connection with, the acceptance or administration of this trust, including those incurred in connection with any action, claim or suit brought to enforce the indemnification or other obligations of the relevant transaction parties; provided, however, that:

(A) with respect to any such claim the Indenture Trustee shall have given the Issuer, the Depositor and the Transaction Manager written notice thereof promptly after the Indenture Trustee shall have actual knowledge thereof, provided, that failure to notify shall not relieve the parties of their obligations hereunder;

(B) notwithstanding anything to the contrary in this Section 7.07(a)(iii), none of the Issuer, the Depositor or the Transaction Manager shall be liable for settlement of any such claim by the Indenture Trustee entered into without the prior consent of the Issuer, the Depositor or the Transaction Manager, as the case may be, which consent shall not be unreasonably withheld or delayed; and

(C) the Indenture Trustee, its officers, directors, employees and agents, as a group, shall be entitled to counsel separate from the Issuer, the Depositor and the Transaction Manager; to the extent the Issuer’s, the Depositor’s and the Transaction Manager’s interests are not adverse to the interests of the Indenture Trustee, its officers, directors, employees or agents, the Indenture Trustee may agree to be represented by the same counsel as the Issuer, the Depositor and the Transaction Manager.

Such payment obligations and indemnification shall survive the resignation or removal of the Indenture Trustee as well as the discharge, termination or assignment hereof. The Indenture Trustee’s expenses are intended as expenses of administration.

Anything in this Indenture to the contrary notwithstanding, in no event shall the Indenture Trustee be liable for special, indirect, punitive or consequential loss or damage of any kind whatsoever (including but not limited to lost profits), even if the Indenture Trustee has been advised of the likelihood of such loss or damage and regardless of the form of action.

(b) The Indenture Trustee shall, on each Payment Date, in accordance with the Priority of Payments set forth in Section 5.05, deduct payment of its fees, expenses and indemnities hereunder from moneys in the Collection Account.

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The Issuer agrees to assume and to pay, and to indemnify, defend and hold harmless the Indenture Trustee and the Noteholders from any taxes which may at any time be asserted with respect to, and as of the date of, the Grant of the Trust Estate to the Indenture Trustee, including, without limitation, any sales, gross receipts, general corporation, personal property, privilege or license taxes (but with respect to the Noteholders only, not including any federal, State or other taxes arising out of the creation or the issuance of the Notes or payments with respect thereto) and costs (including court costs), expenses and reasonable counsel fees and expenses in defending against the same.

Section 7.08. Eligibility; Disqualification. The Indenture Trustee shall always have a combined capital and surplus as stated in Section 7.09, and shall always be a bank or trust company with corporate trust powers organized under the laws of the United States or any State thereof which is a member of the Federal Reserve System and shall be rated at least “A-” by S&P.

Section 7.09. Indenture Trustee's Capital and Surplus. The Indenture Trustee and/or its parent shall at all times have a combined capital and surplus of at least $100,000,000. If the Indenture Trustee publishes annual reports of condition of the type described in Section 310(a)(2) of the Trust Indenture Act of 1939, as amended, its combined capital and surplus for purposes of this Section 7.09 shall be as set forth in the latest such report.

Section 7.10. Resignation and Removal; Appointment of Successor.

(a) No resignation or removal of the Indenture Trustee and no appointment of a successor Indenture Trustee pursuant to this Section 7.10 shall become effective until the acceptance of appointment by the successor Indenture Trustee under Section 7.11.

(b) The Indenture Trustee may resign at any time by giving written notice thereof to the Issuer and the Transaction Manager. If an instrument of acceptance by a successor Indenture Trustee shall not have been delivered to the Indenture Trustee within 30 days after the giving of such notice of resignation, the resigning Indenture Trustee may petition any court of competent jurisdiction for the appointment of a successor Indenture Trustee.

(c) The Indenture Trustee may be removed at any time by the Super-Majority Noteholders of the Controlling Class upon 30 days’ prior written notice, delivered to the Indenture Trustee, with copies to the Transaction Manager and the Issuer.

(d) (i) If at any time the Indenture Trustee shall cease to be eligible under Section 7.08 or 7.09 or shall become incapable of acting or shall be adjudged bankrupt or insolvent, or a receiver of the Indenture Trustee or of its property shall be appointed, or any public officer shall take charge or control of the Indenture Trustee or of its property or affairs for the purpose of rehabilitation, conservation or liquidation, then, in any such case, with 30 days’
prior written notice, the Issuer with the prior written consent of the Super-Majority Noteholders of the Controlling Class, by an Issuer Order, may remove the Indenture Trustee.

(ii) If the Indenture Trustee shall be removed pursuant to Sections 7.10(c) or (d) and no successor Indenture Trustee shall have been appointed pursuant to Section 7.10(e) and accepted such appointment within 30 days of the date of removal, the removed Indenture Trustee may petition any court of competent jurisdiction for appointment of a successor Indenture Trustee acceptable to the Issuer.

(e) If the Indenture Trustee shall resign, be removed or become incapable of acting, or if a vacancy shall occur in the office of the Indenture Trustee for any cause, the Issuer, with the prior written consent of the Majority Noteholders of the Controlling Class, by an Issuer Order shall promptly appoint a successor Indenture Trustee.

(f) The Issuer shall give to the Rating Agency and the Noteholders notice of each resignation and each removal of the Indenture Trustee and each appointment of a successor Indenture Trustee. Each notice shall include the name of the successor Indenture Trustee and the address of its Corporate Trust Office.

(g) The provisions of this Section 7.10 shall apply to any co-trustee or separate trustee appointed by the Issuer and the Indenture Trustee pursuant to Section 7.13.

Section 7.11. Acceptance of Appointment by Successor.

(a) Every successor Indenture Trustee appointed hereunder shall execute, acknowledge and deliver to the Issuer and the retiring Indenture Trustee an instrument accepting such appointment, and thereupon the resignation or removal of the retiring Indenture Trustee shall become effective and such successor Indenture Trustee, without any further act, deed or conveyance, shall become vested with all the rights, powers, trusts and duties of the retiring Indenture Trustee. Notwithstanding the foregoing, on request of the Issuer or the successor Indenture Trustee, such retiring Indenture Trustee shall, upon payment of its fees, expenses and other charges, execute and deliver an instrument transferring to such successor Indenture Trustee all the rights, powers and trusts of the retiring Indenture Trustee and shall duly assign, transfer and deliver to such successor Indenture Trustee all property and money held by such retiring Indenture Trustee hereunder. Upon request of any such successor Indenture Trustee, the Issuer shall execute and deliver any and all instruments for more fully and certainly vesting in and confirming to such successor Indenture Trustee all such rights, powers and trusts.

(b) No successor Indenture Trustee shall accept its appointment unless at the time of such acceptance such successor Indenture Trustee shall be qualified and eligible under Sections 7.08 and 7.09.

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(c) Notwithstanding the replacement of the Indenture Trustee, the obligations of the Issuer pursuant to Section 7.07(a)(iii) and (c) and the Indenture Trustee’s protections under this Article VII shall continue for the benefit of the retiring Indenture Trustee.

Section 7.12. Merger, Conversion, Consolidation or Succession to Business of Indenture Trustee. Any corporation or national banking association into which the Indenture Trustee may be merged or converted or with which it may be consolidated, or any corporation, bank, trust company or national banking association resulting from any merger, conversion or consolidation to which the Indenture Trustee shall be a party, or any corporation, bank, trust company or national banking association succeeding to all or substantially all of the corporate trust business of the Indenture Trustee, shall be the successor of the Indenture Trustee hereunder if such corporation, bank, trust company or national banking association shall be otherwise qualified and eligible under Section 7.08 and 7.09, without the execution or filing of any paper or any further act on the part of any of the parties hereto. The Indenture Trustee shall provide the Rating Agency written notice of any such transaction. In case any Notes have been authenticated, but not delivered, by the Indenture Trustee then in office, any successor by merger, conversion or consolidation to such authenticating Indenture Trustee may adopt such authentication and deliver the Notes so authenticated with the same effect as if such successor Indenture Trustee had authenticated such Notes.

Section 7.13. Co-trustees and Separate Indenture Trustees.

(a) At any time or times, for the purpose of meeting the legal requirements of any jurisdiction in which any of the Trust Estate may at the time be located, for enforcement actions, and where a conflict of interest exists, the Indenture Trustee shall have power to appoint and, upon the written request of the Indenture Trustee, the Issuer shall for such purpose join with the Indenture Trustee in the execution, delivery and performance of all instruments and agreements necessary or proper to appoint, one or more Persons approved by the Indenture Trustee either to act as co-trustee, jointly with the Indenture Trustee, of all or any part of the Trust Estate, or to act as separate trustee of any such property, in either case with such powers as may be provided in the instrument of appointment, and to vest in such Person or Persons in the capacity aforesaid, any property, title, right or power deemed necessary or desirable, subject to the other provisions of this Section 7.13. If the Issuer does not join in such appointment within 15 days after the receipt by it of a request so to do, or in case an Event of Default has occurred and is continuing, the Indenture Trustee alone shall have power to make such appointment. Any Person so appointed shall assume the obligations of the Indenture Trustee hereunder in full.

(b) Should any written instrument from the Issuer be required by any co-trustee or separate trustee so appointed for more fully confirming to such co-trustee or separate trustee such property, title, right or power, any and all such instruments shall, on request, be executed, acknowledged and delivered by the Issuer.

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(c) Every co-trustee or separate trustee shall, to the extent permitted by law, but to such extent only, be appointed subject to the following terms:

(i) The Notes shall be authenticated and delivered and all rights, powers, duties and obligations hereunder with respect to the custody of securities, cash and other personal property held by, or required to be deposited or pledged with, the Indenture Trustee hereunder, shall be exercised solely by the Indenture Trustee.

(ii) The rights, powers, duties and obligations hereby conferred or imposed upon the Indenture Trustee with respect to any property covered by such appointment shall be conferred or imposed upon and exercised or performed by the Indenture Trustee and such co-trustee or separate trustee jointly, except to the extent that under any law of any jurisdiction in which any particular act is to be performed, the Indenture Trustee shall be incompetent or unqualified to perform such act, in which event such rights, powers, duties and obligations shall be exercised and performed solely by such co-trustee or separate trustee.

(iii) The Indenture Trustee at any time, by an instrument in writing executed by it, may accept the resignation of, or remove, any co-trustee or separate trustee appointed under this Section 7.13. Upon the written request of the Indenture Trustee, the Issuer shall join with the Indenture Trustee in the execution, delivery and performance of all instruments and agreements necessary or proper to effectuate such resignation or removal. A successor to any co-trustee or separate trustee so resigned or removed may be appointed in the manner provided in this Section 7.13.

(iv) No co-trustee or separate trustee hereunder shall be financially or otherwise liable by reason of any act or omission of the Indenture Trustee, or any other such trustee hereunder, and the Indenture Trustee shall not be financially or otherwise liable by reason of any act or omission of any co-trustee or other such separate trustee hereunder.

(v) Any notice, request or other writing delivered to the Indenture Trustee shall be deemed to have been delivered to each such co-trustee and separate trustee.

(vi) Any separate trustee or co-trustee may, at any time, constitute the Indenture Trustee, its agent or attorney-in-fact, with full power and authority, to the extent not prohibited by law, to do any lawful act under or with respect to this Indenture on its behalf and in its name. The Indenture Trustee shall not be responsible for any action or inaction of any such separate trustee or co-trustee. The Indenture Trustee shall not have any responsibility or liability relating to the appointment of any separate or co-trustee. If any separate trustee or co-trustee shall die, become incapable of acting, resign or be removed, all of its estate, properties, rights, remedies and trusts shall vest in and be exercised by the

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Indenture Trustee, to the extent permitted by law, without the appointment of a new or successor trustee.

Section 7.14. Books and Records. The Indenture Trustee agrees to provide to the Noteholders the right during normal business hours upon two days’ prior notice in writing to inspect its books and records insofar as the books and records relate to the functions and duties of the Indenture Trustee pursuant to this Indenture.

Section 7.15. Control. Upon the Indenture Trustee being adequately indemnified in writing to its satisfaction, the Majority Noteholders of the Controlling Class shall have the right to direct the Indenture Trustee with respect to any action or inaction by the Indenture Trustee hereunder, the exercise of any trust or power conferred on the Indenture Trustee, or the conduct of any proceeding for any remedy available to the Indenture Trustee with respect to the Notes or the Trust Estate provided that:

(a) such direction shall not be in conflict with any rule of law or with this Indenture or expose the Indenture Trustee to financial or other liability (for which it has not been adequately indemnified) or be unduly prejudicial to the Noteholders not approving such direction including, but not limited to and without intending to narrow the scope of this limitation, direction to the Indenture Trustee to act or omit to act, directly or indirectly, to amend, hypothecate, subordinate, terminate or discharge any Lien benefiting the Noteholders in the Trust Estate;

(b) the Indenture Trustee may take any other action deemed proper by the Indenture Trustee which is not inconsistent with such direction; and

(c) except as expressly provided otherwise herein (but only with the prior consent of or at the direction of the Majority Noteholders of the Controlling Class), the Indenture Trustee shall have the authority to take any enforcement action to enforce the provisions of this Indenture.

Section 7.16. Suits for Enforcement. If an Event of Default of which a Responsible Officer of the Indenture Trustee shall have actual knowledge, shall occur and be continuing, the Indenture Trustee may, in its discretion and shall, at the direction of the Majority Noteholders of the Controlling Class (provided that the Indenture Trustee is adequately indemnified in writing to its satisfaction), proceed to protect and enforce its rights and the rights of any Noteholders under this Indenture by a suit, action or proceeding in equity or at law or otherwise, whether for the specific performance of any covenant or agreement contained in this Indenture or in aid of the execution of any power granted in this Indenture or for the enforcement of any other legal, equitable or other remedy as the Indenture Trustee, being advised by counsel, shall deem most effectual to protect and enforce any of the rights of the Indenture Trustee or any Noteholders, but in no event shall the Indenture Trustee be liable for any failure to act in the absence of direction the Majority Noteholders of the Controlling Class.

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Section 7.17. Compliance with Applicable Anti-Terrorism and Anti-Money Laundering Regulations. In order to comply with laws, rules and regulations applicable to banking institutions, including those relating to the funding of terrorist activities and money laundering, the Indenture Trustee is required to obtain, verify and record certain information relating to individuals and entities which maintain a business relationship with Indenture Trustee. Accordingly, each of the parties agrees to provide to Indenture Trustee upon its request from time to time such identifying information and documentation as may be available for such party in order to enable Indenture Trustee to comply with applicable law.

ARTICLE VIII

[RESERVED]

ARTICLE IX

EVENT OF DEFAULT

Section 9.01. Events of Default. The occurrence of any of the following events shall constitute an “Event of Default” hereunder:

(a) a default in the payment of any Note Interest (which, for the avoidance of doubt, does not include Deferred Interest) on a Payment Date, which default shall not have been cured after three Business Days;

(b) a default in the payment of the Aggregate Outstanding Note Balance or any Deferred Interest at the Rated Final Maturity;

(c) either (A) a court having jurisdiction in respect of the Issuer enters a decree or order for (1) relief in respect of the Issuer, all Managing Members or all Project Companies under any Applicable Law relating to bankruptcy, restructuring, insolvency, receivership, winding-up, liquidation, reorganization, examination, relief of debtors or other similar law now or hereafter in effect; (2) appointment of a receiver, receiver and manager, liquidator, examiner, assignee, custodian, trustee, sequestrator or similar official of the Issuer, all Managing Members or all Project Companies; or (3) the winding up or liquidation of the affairs of such Issuer and, in each case, such decree or order shall remain unstayed or such writ or other process shall not have been stayed or dismissed within sixty (60) days from entry thereof; or (B) the Issuer, all Managing Members or all Project Companies, (1) commences a voluntary case under any Applicable Law relating to bankruptcy, restructuring, insolvency, receivership, winding-up, liquidation, reorganization, examination, relief of debtors or other similar law now or hereafter in effect, or consents to the entry of an order for relief in any involuntary case under any such law; (2) consents to the appointment of or taking possession by a receiver, receiver and manager, liquidator, examiner, assignee, custodian, trustee,

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sequestrator or similar official of the Issuer, all Managing Members or all Project Companies or for all or substantially all of the property and assets of the Issuer, all Managing Members or all Project Companies; or (3) effects any general assignment for the benefit of creditors, admits in writing its inability to pay its debts generally as they come due, voluntarily suspends payment of its obligations or becomes insolvent;

(d) the failure of the Issuer to observe or perform in any material respect any covenant or obligation of the Issuer set forth in this Indenture (other than the failure to make any required payment with respect to the Notes), which has not been cured within 30 days from the date of receipt by the Issuer of written notice from the Indenture Trustee (to the extent a Responsible Officer of the Indenture Trustee has received written notice or has actual knowledge thereof) of such breach or default, or the failure of the Issuer to deposit into the Collection Account all amounts held or received by the Issuer required to be deposited therein within three (3) Business Days of the required deposit date;

(e) any representation, warranty or statement of the Issuer (other than representations and warranties as to whether a Solar Asset is an Eligible Solar Asset) contained in the Transaction Documents or any report, document or certificate delivered by the Issuer pursuant to the foregoing agreements shall prove to be incorrect in any material respect as of the time when the same shall have been made and, within 30 days after written notice thereof shall have been given to the Indenture Trustee and the Issuer by the Transaction Manager, the Indenture Trustee (to the extent a Responsible Officer of the Indenture Trustee has received written notice or has actual knowledge thereof) or by the Majority Noteholders of the Controlling Class, the circumstance or condition in respect of which such representation, warranty or statement was incorrect shall not have been eliminated or otherwise cured (which cure may be effected by payment of an indemnity claim) or waived by the Indenture Trustee, acting at the direction of the Majority Noteholders of the Controlling Class;

(f) the failure for any reason of the Indenture Trustee to have a first priority perfected security interest in the Trust Estate in favor of the Indenture Trustee (subject to Permitted Liens) which is not stayed, released or otherwise cured within ten days of receipt of notice or knowledge thereof;

(g) the Issuer, any Project Company or any Managing Member becomes subject to registration as an “investment company” under the 1940 Act;

(h) the Issuer, any Project Company or any Managing Member shall become taxable as an association (or publicly traded partnership taxable as a corporation) for U.S. federal or state income tax purposes;

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(i) the failure by the Depositor or the Performance Guarantor to pay the Liquidated Damages Amount for a Defective Solar Asset in accordance with the Depositor Contribution Agreement or Performance Guaranty as applicable; or

(j) there shall remain in force, undischarged, unsatisfied, and unstayed for more than 30 consecutive days, any final non-appealable judgment in the amount of $100,000 or more against the Issuer not covered by insurance.

In the case of any event described in the foregoing subparagraphs, after the applicable grace period set forth in such subparagraphs, if any, the Indenture Trustee shall give written notice to the Noteholders, the Rating Agency, the Transaction Manager, the Transaction Transition Manager and the Issuer that an Event of Default has occurred as of the date of such notice. The Issuer is required to give the Indenture Trustee written notice of the occurrence of any Event of Default promptly and in any event within two (2) Business Days after the Issuer has actual knowledge thereof.

Section 9.02. Actions of Indenture Trustee. If an Event of Default shall have occurred and be continuing hereunder, the Indenture Trustee shall, at the direction of the Super-Majority Noteholders of the Controlling Class, do one of the following:

(a) declare the entire unpaid principal amount of the Notes, all interest accrued and unpaid thereon and all other amounts payable under this Indenture and the other Transaction Documents to be immediately due and payable;

(b) either on its own or through an agent, take possession of and sell the Trust Estate pursuant to Section 9.15, provided, however, that neither the Indenture Trustee nor any collateral agent may sell or otherwise liquidate the Trust Estate unless either (i) the proceeds of such sale or liquidation are sufficient to discharge in full the amounts then due and unpaid upon the Notes for principal and accrued interest and the fees and all other amounts required to be paid pursuant to the Priority of Payments or (ii) the Holders of 100% of the Aggregate Outstanding Note Balance consent thereto;

(c) institute proceedings for collection of amounts due on the Notes or under this Indenture by automatic acceleration or otherwise, or if no such acceleration or collection efforts have been made, or if such acceleration or collection efforts have been made, but have been annulled or rescinded, the Indenture Trustee may elect to take possession of the Trust Estate and collect or cause the collection of the proceeds thereof and apply such proceeds in accordance with the applicable provisions of this Indenture;

(d) enforce any judgment obtained and collect any amounts adjudged from the Issuer;

(e) institute any proceedings for the complete or partial foreclosure of the Lien created by the Indenture with respect to the Trust Estate; and

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(f) protect the rights of the Indenture Trustee and the Noteholders by taking any appropriate action including exercising any remedy of a secured party under the UCC or any other applicable law.

Notwithstanding the foregoing, upon the occurrence of an Event of Default of the type described in clause (c) of the definition thereof, the entire Aggregate Outstanding Note Balance, all interest accrued and unpaid thereon and all other amounts payable under this Indenture and the other Transaction Documents shall automatically become immediately due and payable.

Section 9.03. Indenture Trustee May File Proofs of Claim. In case of the pendency of any receivership, insolvency, liquidation, bankruptcy, reorganization, arrangement, composition or other judicial proceeding relative to the Issuer or any other obligor upon the Notes or the property of the Issuer or of such other obligor or their creditors, the Indenture Trustee (irrespective of whether the Notes shall then be due and payable as therein expressed or by declaration or otherwise and irrespective of whether the Indenture Trustee shall have made any demand on the Issuer for the payment of overdue principal or any interest or other amounts) shall, at the written direction of the Majority Noteholders of the Controlling Class, by intervention in such proceeding or otherwise:

(a) file and prove a claim for the whole amount owing and unpaid with respect to the Notes issued hereunder and file such other papers or documents as may be necessary or advisable in order to have the claims of the Indenture Trustee (including any claim for the reasonable compensation, expenses, disbursements and advances of the Indenture Trustee, its agents and counsel) and of the Noteholders allowed in such proceeding; and

(b) collect and receive any moneys or other property payable or deliverable on any such claims and to distribute the same;

and any receiver, assignee, trustee, liquidator, or sequestrator (or other similar official) in any such proceeding is hereby authorized by each Noteholder to make such payments to the Indenture Trustee and, in the event that the Indenture Trustee shall consent to the making of such payments directly to the Noteholders, to pay to the Indenture Trustee any amount due to it for the reasonable compensation, expenses, disbursements and advances of the Indenture Trustee, its agents and counsel, and any other amounts due the Indenture Trustee under Section 7.07.

Nothing herein contained shall be deemed to authorize the Indenture Trustee to authorize and consent to or accept or adopt on behalf of any Noteholder any plan of reorganization, arrangement, adjustment, or composition affecting any of the Notes or the rights of any Noteholder thereof, or to authorize the Indenture Trustee to vote with respect to the claim of any Noteholder in any such proceeding.

Section 9.04. Indenture Trustee May Enforce Claim Without Possession of Notes. All rights of action and claims under this Indenture or the Notes may be prosecuted and enforced by the

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Indenture Trustee without the possession of any of the Notes or the production thereof in any proceeding relating thereto, and any such proceeding instituted by the Indenture Trustee shall be brought in its own name as trustee for the benefit of the Noteholders, and any recovery of judgment shall be applied first, to the payment of the reasonable compensation, expenses, disbursements and advances of the Indenture Trustee, its agents and counsel and any other amounts due the Indenture Trustee under Section 7.07 (provided that, any indemnification by the Issuer under Section 7.07 shall be paid only in the priority set forth in Section 5.05) and second, for the ratable benefit of the Noteholders for all amounts due to such Noteholders.

Section 9.05. Knowledge of Indenture Trustee. Any references herein to the knowledge, discovery or learning of the Indenture Trustee shall mean and refer to actual knowledge of a Responsible Officer of the Indenture Trustee.

Section 9.06. Limitation on Suits. No Holder of any Note shall have any right to institute any proceeding, judicial or otherwise, with respect to this Indenture, or for the appointment of a receiver or trustee, or for any other remedy hereunder unless:

(a) such Holder has previously given written notice to the Indenture Trustee of a continuing Event of Default;

(b) the Majority Noteholders of the Controlling Class shall have made written request to the Indenture Trustee to institute proceedings with respect to such Event of Default in its own name as Indenture Trustee hereunder;

(c) such Holder or Holders have offered to the Indenture Trustee reasonable indemnity against the costs, expenses and liabilities to be incurred in compliance with such request;

(d) the Indenture Trustee for 30 days after its receipt of such notice, request and offer of security or indemnity has failed to institute any such proceedings; and

(e) no direction inconsistent with such written request has been given to the Indenture Trustee during such 30-day period by the Majority Noteholders of the Controlling Class;

it being understood and intended that no one or more Holders of Notes shall have any right in any manner whatever by virtue of, or by availing of, any provision of this Indenture to affect, disturb or prejudice the rights of any other Holders of Notes, or to obtain or to seek to obtain priority or preference over any other Holders or to enforce any right under this Indenture, except in the manner herein provided.

Section 9.07. Unconditional Right of Noteholders to Receive Principal and Interest. The Holders of the Notes shall have the right, which is absolute and unconditional, subject to the express terms of this Indenture, to receive payment of principal and interest on such Notes, subject to the respective relative priorities provided for in this Indenture, as such principal and interest becomes

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due and payable from the Trust Estate and to institute Proceedings for the enforcement of any such payment, and such right shall not be impaired except as expressly permitted herein without the consent of such Holders.

Section 9.08. Restoration of Rights and Remedies. If the Indenture Trustee or any Noteholder has instituted any Proceeding to enforce any right or remedy under this Indenture and such Proceeding has been discontinued or abandoned for any reason, or has been determined adversely to the Indenture Trustee or to such Noteholder, then, and in every case, the Issuer, the Indenture Trustee and the Noteholders shall, subject to any determination in such Proceeding, be restored severally and respectively to their former positions hereunder, and thereafter all rights and remedies of the Indenture Trustee and the Noteholders shall continue as though no such Proceeding had been instituted.

Section 9.09. Rights and Remedies Cumulative. Except as otherwise provided with respect to the replacement or payment of mutilated, destroyed, lost or stolen Notes in Section 2.09, no right or remedy herein conferred upon or reserved to the Indenture Trustee or to the Noteholders is intended to be exclusive of any other right or remedy, and every right and remedy shall, to the extent permitted by law, be cumulative and in addition to every other right and remedy given hereunder or now or hereafter existing at law or in equity or otherwise. The assertion or employment of any right or remedy hereunder, or otherwise, shall not prevent the concurrent assertion or employment of any other appropriate right or remedy.

Section 9.10. Delay or Omission; Not Waiver. No delay or omission of the Indenture Trustee or of any Holder of any Note to exercise any right or remedy accruing upon any Event of Default shall impair any such right or remedy or constitute a waiver of any such Event of Default or any acquiescence therein. Every right and remedy given by this Article IX or by law to the Indenture Trustee or to the Noteholders may be exercised from time to time, and as often as may be deemed expedient, by the Indenture Trustee or by the Noteholders, as the case may be.

Section 9.11. Control by Noteholders. The Majority Noteholders of the Controlling Class shall have the right to direct the time, method and place of conducting any Proceeding for any remedy available to the Indenture Trustee or exercising any trust or power conferred on the Indenture Trustee; provided that:

(a) such direction shall not be in conflict with any rule of law or with this Indenture including, without limitation, any provision hereof which expressly provides for approval by a greater percentage of the aggregate principal amount of all Outstanding Notes;

(b) the Indenture Trustee may take any other action deemed proper by the Indenture Trustee which is not inconsistent with such direction; provided, however, that, subject to Section 7.01, the Indenture Trustee need not take any action which a Responsible Officer or Officers

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of the Indenture Trustee in good faith determines might involve it in personal liability (unless the Indenture Trustee is furnished with the reasonable indemnity referred to in Section 9.11(c)); and

(c) the Indenture Trustee has been furnished reasonable indemnity against costs, expenses and liabilities which it might incur in connection therewith.

Section 9.12. Waiver of Certain Events by Less Than All Noteholders. The Super-Majority Noteholders of the Controlling Class may, on behalf of the Holders of all the Notes, waive any past Default, Event of Default or Transaction Manager Termination Event, and its consequences, except:

(a) a Default in the payment of the principal of or interest on any Note, or a Default caused by the Issuer becoming subject to registration as an “investment company” under the 1940 Act, or

(b) with respect to a covenant or provision hereof which under Article X cannot be modified or amended without the consent of the Holder of each Outstanding Note affected.

Upon any such waiver, such Default, Event of Default or Transaction Manager Termination Event shall cease to exist, and any Default, Event of Default or Transaction Manager Termination Event or other consequence arising therefrom shall be deemed to have been cured for every purpose of this Indenture; but no such waiver shall extend to any subsequent or other Default, Event of Default or Transaction Manager Termination Event or impair any right consequent thereon.

Section 9.13. Undertaking for Costs. All parties to this Indenture agree, and each Noteholder and each Note Owner by its acceptance of a Note, shall be deemed to have agreed, that any court may in its discretion require, in any suit for the enforcement of any right or remedy under this Indenture, or in any suit against the Indenture Trustee for any action taken, suffered or omitted by it as Indenture Trustee, the filing by any party litigant in such suit of an undertaking to pay the costs of such suit, and that such court may in its discretion assess reasonable costs, including reasonable attorneys’ fees, against any party litigant in such suit, having due regard to the merits and good faith of the claims or defenses made by such party litigant; but the provisions of this Section 9.13 shall not apply to any suit instituted by the Indenture Trustee or to any suit instituted by any Noteholder for the enforcement of the payment of the principal of or interest on any Note on or after the Rated Final Maturity expressed in such Note.

Section 9.14. Waiver of Stay or Extension Laws. The Issuer covenants (to the extent that it may lawfully do so) that it will not, at any time, insist upon, or plead, or in any manner whatsoever claim or take the benefit or advantage of, any stay or extension law wherever enacted, now or at any time hereafter in force, which may affect the covenants or the performance of this Indenture; and the Issuer (to the extent that it may lawfully do so) hereby expressly waives all benefit or advantage of any such law, and covenants that it will not hinder, delay or impede the execution of
any power herein granted to the Indenture Trustee, but will suffer and permit the execution of every such power as though no such law had been enacted.

Section 9.15. Sale of Trust Estate.

(a) The power to effect any sale of any portion of the Trust Estate pursuant to this Article IX shall not be exhausted by any one or more sales as to any portion of the Trust Estate remaining unsold, but shall continue unimpaired until the entire Trust Estate securing the Notes shall have been sold or all amounts payable on the Notes and under this Indenture with respect thereto shall have been paid. The Indenture Trustee, acting on its own or through an agent, may from time to time postpone any sale by public announcement made at the time and place of such sale.

(b) The Indenture Trustee shall not, in any private sale, sell to a third party the Trust Estate, or any portion thereof unless the Super-Majority Noteholders of the Controlling Class direct the Indenture Trustee, in writing, to make such sale or unless either (i) the proceeds of such sale or liquidation are sufficient to discharge in full the amounts then due and unpaid upon the Notes for principal and accrued interest and the fees and all other amounts required to be paid pursuant the Priority of Payments or (ii) the Holders of 100% of the principal amount of each Class of Notes then Outstanding consent thereto.

(c) The Indenture Trustee or any Noteholder may bid for and acquire any portion of the Trust Estate in connection with a public or private sale thereof, and in lieu of paying cash therefor, any Noteholder may make settlement for the purchase price by crediting against amounts owing on the Notes of such Holder or other amounts owing to such Holder secured by this Indenture, that portion of the net proceeds of such sale to which such Holder would be entitled, after deducting the reasonable costs, charges and expenses incurred by the Indenture Trustee or the Noteholders in connection with such sale. The Notes need not be produced in order to complete any such sale, or in order for the net proceeds of such sale to be credited against the Notes. The Indenture Trustee or the Noteholders may hold, lease, operate, manage or otherwise deal with any property so acquired in any manner permitted by law.

(d) The Indenture Trustee shall execute and deliver an appropriate instrument of conveyance transferring its interest in any portion of the Trust Estate in connection with a sale thereof. In addition, the Indenture Trustee is hereby irrevocably appointed the agent and attorney-in-fact of the Issuer to transfer and convey its interest in any portion of the Trust Estate in connection with a sale thereof, and to take all action necessary to effect such sale. No purchaser or transferee at such a sale shall be bound to ascertain the Indenture Trustee’s authority, inquire into the satisfaction of any conditions precedent or see to the application of any monies.

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(e) The method, manner, time, place and terms of any sale of all or any portion of the Trust Estate shall be commercially reasonable.

(f) This Section 9.15 is subject to Section 7.01(i).

Section 9.16. Action on Notes. The Indenture Trustee’s right to seek and recover judgment on the Notes or under this Indenture shall not be affected by the seeking, obtaining or application of any other relief under or with respect to this Indenture. Neither the Lien of this Indenture nor any rights or remedies of the Indenture Trustee or the Noteholders shall be impaired by the recovery of any judgment by the Indenture Trustee against the Issuer or by the levy of any execution under such judgment upon any portion of the Trust Estate or upon any of the assets of the Issuer.

ARTICLE X

SUPPLEMENTAL INDENTURES

Section 10.01. Supplemental Indentures Without Noteholder Approval.

(a) Provided that (i) the Issuer shall have provided prior written notice to the Rating Agency of such modification, (ii) the Indenture Trustee shall have received a Tax Opinion, and (iii) if requested by the Indenture Trustee, the Indenture Trustee shall (x) have received an opinion that (a) such modification is authorized or permitted under the terms of this Indenture and will not have a material adverse effect on any Noteholder, and (b) that all conditions precedent to the execution of such modification have been satisfied or (y) have received an officer’s certificate of the Transaction Manager that such modification is authorized or permitted under the terms of this Indenture and will not have a material adverse effect on any Noteholder and the Indenture Trustee shall have received Rating Agency Confirmation with respect to such action (provided that the Issuer shall not be required to obtain Rating Agency Confirmation or the consent of any person with respect to any modification described in clauses (i), (ii) or (iii) below), the Issuer and the Indenture Trustee, when authorized and directed by an Issuer Order, at any time and from time to time, may without the consent of the Noteholders, enter into one or more amendments or indentures supplemental hereto, in form satisfactory to the Indenture Trustee for any of the following purposes:

(i) to correct, amplify or add to the description of any property at any time subject to the Lien of this Indenture, or better to assure, convey and confirm unto the Indenture Trustee any property subject or required to be subjected to the Lien of this Indenture, or to subject to the Lien of this Indenture additional property;

(ii) to evidence the succession of another Person to either the Issuer or the Indenture Trustee in accordance with the terms hereof, and the assumption by any such successor of the covenants of the Issuer or the Indenture Trustee contained herein and in the Notes;

80

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(iii) to cure any ambiguity, to correct or supplement any provision herein which may be defective or inconsistent with any other provision herein or to conform the provisions herein to the descriptions set forth in the Offering Circular;

(iv) to add to the covenants of the Issuer or the Indenture Trustee, for the benefit of the Noteholders or to surrender any right or power herein conferred upon the Issuer; or

(v) to effect any matter specified in Section 10.06.

(b) Promptly after the execution by the Issuer and the Indenture Trustee of any amendment or supplemental indenture pursuant to this Section 10.01, the Indenture Trustee shall make available to the Noteholders and the Rating Agency a copy of such supplemental indenture. Any failure of the Indenture Trustee to mail such copy shall not, however, in any way impair or affect the validity of any such amendment or supplemental indenture.

Section 10.02. Supplemental Indentures with Consent of Noteholders.

(a) With the prior written consent of each Noteholder affected thereby, prior written notice to the Rating Agency and receipt by the Indenture Trustee of a Tax Opinion, the Issuer and the Indenture Trustee, when authorized and directed by an Issuer Order, at any time and from time to time, may enter into an amendment or a supplemental indenture for the purpose of adding any provisions to, or changing in any manner or eliminating any of the provisions of, this Indenture or of modifying in any manner the rights of the Noteholders under this Indenture for the following purposes:

(i) to change the Rated Final Maturity of the principal of any Note, or the due date of any payment of interest on any Note, or reduce the principal amount thereof, or the interest rate thereon, change the place of payment where, or the coin or currency in which any Note or any interest thereon is payable, or impair the right to institute suit for the enforcement of the payment of interest due on any Note on or after the due date thereof or for the enforcement of the payment of the entire remaining unpaid principal amount of any Note on or after the Rated Final Maturity thereof or change any provision of Article VI regarding the amounts payable upon any Voluntary Prepayment of the Notes;

(ii) to reduce the percentage of the Outstanding Note Balance of any Class of Notes, the consent of the Noteholders of which is required to approve any such supplemental indenture; or the consent of the Noteholders of which is required for any waiver of compliance with provisions of this Indenture or Events of Default or Transaction Manager Termination Events under this Indenture or under the Transaction Management Agreement and their consequences provided for in this Indenture or for any other purpose hereunder;

(iii) to modify any of the provisions of this Section 10.02:

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(iv) to modify or alter the provisions of the proviso to the definition of the term “Outstanding”; or

(v) to permit the creation of any other Lien with respect to any part of the Trust Estate or terminate the Lien of this Indenture on any property at any time subject hereto or, except with respect to any action which would not have a material adverse effect on any Noteholder (as evidenced by an Opinion of Counsel to such effect), deprive the Noteholder of the security afforded by the Lien of this Indenture.

(b) With the prior written consent of the Majority Noteholders of the Controlling Class, and receipt by the Indenture Trustee of a Tax Opinion, the Issuer and the Indenture Trustee, when authorized and directed by an Issuer Order, at any time and from time to time, may enter into one or more amendments or indentures supplemental hereto, in form and substance satisfactory to the Indenture Trustee (acting at the direction of the Majority Noteholders of the Controlling Class) for the purpose of modifying, eliminating or adding to the provisions of this Indenture; provided, that such supplemental indentures shall not have any of the effects described in paragraphs (i) through (v) of Section 10.02(a).

(c) Promptly after the execution by the Issuer and the Indenture Trustee of any amendment or supplemental indenture pursuant to this Section 10.02, the Indenture Trustee shall make available to the Noteholders and the Rating Agency a copy of such supplemental indenture. Any failure of the Indenture Trustee to mail such copy shall not, however, in any way impair or affect the validity of any such supplemental indenture.

(d) Whenever the Issuer or the Indenture Trustee solicits a consent to any amendment or supplement to the Indenture, the Issuer shall fix a record date in advance of the solicitation of such consent for the purpose of determining the Noteholders entitled to consent to such amendment or supplement. Only those Noteholders at such record date shall be entitled to consent to such amendment or supplement whether or not such Noteholders continue to be Holders after such record date.

Section 10.03. Execution of Amendments and Supplemental Indentures. In executing, or accepting the additional trusts created by, any amendment or supplemental indenture permitted by this Article X or the modifications thereby of the trusts created by this Indenture, the Indenture Trustee shall be entitled to receive, and (subject to Section 7.01) shall be fully protected in relying upon, an Opinion of Counsel (i) stating that the execution of such supplemental indenture is authorized or permitted by this Indenture and (ii) in accordance with Section 3.06. The Indenture Trustee may, but shall not be obligated to, enter into any such supplemental indenture which affects the Indenture Trustee’s own rights, duties or immunities under this Indenture or otherwise.

82

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Section 10.04. Effect of Amendments and Supplemental Indentures. Upon the execution of any amendment or supplemental indenture under this Article X, this Indenture shall be modified in accordance therewith, and such supplemental indenture shall form a part of this Indenture for all purposes; and every Holder of Notes which have theretofore been or thereafter are authenticated and delivered hereunder shall be bound thereby.

Section 10.05. Reference in Notes to Amendments and Supplemental Indentures. Notes authenticated and delivered after the execution of any amendment or supplemental indenture pursuant to this Article X may, and if required by the Issuer shall, bear a notation as to any matter provided for in such supplemental indenture. If the Issuer shall so determine, new Notes so modified as to conform to any such supplemental indenture may be prepared and executed by the Issuer and authenticated and delivered by the Indenture Trustee in exchange for Outstanding Notes.

Section 10.06. Indenture Trustee to Act on Instructions. Notwithstanding any provision herein to the contrary (other than Section 10.02), in the event the Indenture Trustee is uncertain as to the intention or application of any provision of this Indenture or any other agreement to which it is a party, or such intention or application is ambiguous as to its purpose or application, or is, or appears to be, in conflict with any other applicable provision thereof, or if this Indenture or any other agreement to which it is a party permits or does not prohibit any determination by the Indenture Trustee, or is silent or incomplete as to the course of action which the Indenture Trustee is required or is permitted or may be permitted to take with respect to a particular set of facts or circumstances, the Indenture Trustee shall, at the expense of the Issuer, be entitled to request and rely upon the following: (a) written instructions of the Issuer directing the Indenture Trustee to take certain actions or refrain from taking certain actions, which written instructions shall contain a certification that the taking of such actions or refraining from taking certain actions is in the best interest of the Noteholders and (b) prior written consent of the Majority Noteholders of the Controlling Class. In such case, the Indenture Trustee shall have no liability to the Issuer or the Noteholders for, and the Issuer shall hold harmless the Indenture Trustee from, any liability, costs or expenses arising from or relating to any action taken by the Indenture Trustee acting upon such instructions, and the Indenture Trustee shall have no responsibility to the Noteholders with respect to any such liability, costs or expenses. The Issuer shall provide a copy of such written instructions to the Rating Agency.

ARTICLE XI

[RESERVED]

ARTICLE XII

MISCELLANEOUS

83

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Section 12.01. Compliance Certificates and Opinions; Furnishing of Information. Upon any application or request by the Issuer to the Indenture Trustee to take any action under any provision of this Indenture (except with respect to ordinary course actions under this Indenture and except as otherwise specifically provided in this Indenture), the Issuer, at the request of the Indenture Trustee, shall furnish to the Indenture Trustee a certificate stating that all conditions precedent, if any, provided for in this Indenture relating to the proposed action have been complied with and an Opinion of Counsel stating that, in the opinion of such counsel, all such conditions precedent, if any, have been complied with, except that in the case of any such application or request as to which the furnishing of certificates and Opinions of Counsel are specifically required by any provision of this Indenture relating to such particular application or request, no additional certificate or Opinion of Counsel need be furnished.

Section 12.02. Form of Documents Delivered to Indenture Trustee.

(a) If several matters are required to be certified by, or covered by an opinion of, any specified Person, it is not necessary that all such matters be certified by, or covered by the opinion of, only one such Person, or that they be so certified or covered by only one document, but one such Person may certify or give an opinion with respect to some matters and one or more other such Persons as to other matters, and any such Person may certify or give an opinion as to such matters in one or several documents.

(b) Any certificate or opinion of an Authorized Officer of the Issuer may be based, insofar as it relates to legal matters, upon a certificate or opinion of, or representations by outside counsel, unless such Authorized Officer knows, or in the exercise of reasonable care should know, that the certificate or opinion or representations with respect to the matters upon which his certificate or opinion is based are erroneous. Any such certificate or opinion or any Opinion of Counsel may be based, insofar as it relates to factual matters, upon a certificate or opinion of, or representations by, an Authorized Officer of any relevant Person, stating that the information with respect to such factual matters is in the possession of such Person, unless such officer or counsel knows, or in the exercise of reasonable care should know, that the certificate or opinion or representations with respect to such matters are erroneous. Any Opinion of Counsel may be based on the written opinion of other counsel, in which event such Opinion of Counsel shall be accompanied by a copy of such other counsel’s opinion and shall include a statement to the effect that such counsel believes that such counsel and the Indenture Trustee may reasonably rely upon the opinion of such other counsel.

(c) Where any Person is required to make, give or execute two or more applications, requests, consents, notices, statements, opinions or other instruments under this Indenture, they may, but need not, be consolidated and form one instrument.

(d) Wherever in this Indenture, in connection with any application or certificate or report to the Indenture Trustee, it is provided that the Issuer or the Transaction Manager shall deliver any

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document as a condition of the granting of such application, or as evidence of the Issuer’s or the Transaction Manager’s compliance with any term hereof, it is intended that the truth and accuracy, at the time of the granting of such application or at the effective date of such notice or report (as the case may be), of the facts and opinions stated in such document shall in such case be conditions precedent to the right of the Issuer to have such application granted or to the sufficiency of such notice or report. The foregoing shall not, however, be construed to affect the Indenture Trustee’s right to rely upon the truth and accuracy of any statement or opinion contained in any such document as provided in Section 7.01(b)(ii).

(e) Wherever in this Indenture it is provided that the absence of the occurrence and continuation of a Default, an Event of Default or a Transaction Manager Termination Event is a condition precedent to the taking of any action by the Indenture Trustee at the request or direction of the Issuer, then notwithstanding that the satisfaction of such condition is a condition precedent to the Issuer’s or the Indenture Trustee’s right to make such request or direction, the Indenture Trustee shall be protected in acting in accordance with such request or direction if a Responsible Officer of the Indenture Trustee does not have actual knowledge of the occurrence and continuation of such Default, Event of Default or Transaction Manager Termination Event.

Section 12.03. Acts of Noteholders.

(a) Any request, demand, authorization, direction, notice, consent, waiver or other action provided by this Indenture to be given or taken by Noteholders may be embodied in and evidenced by one or more instruments of substantially similar tenor signed by such Noteholders in person or by an agent duly appointed in writing; and, except as herein otherwise expressly provided, such action shall become effective when such instrument or instruments are delivered to the Indenture Trustee, and, where it is hereby expressly required, to the Issuer. Such instrument or instruments (and the action embodied therein and evidenced thereby) are herein sometimes referred to as the “Act” of the Noteholders signing such instrument or instruments. Proof of execution of any such instrument or of a writing appointing any such agent shall be sufficient for any purpose of this Indenture and (subject to Section 7.01) conclusive in favor of the Indenture Trustee and the Issuer, if made in the manner provided in this Section 12.03.

(b) The fact and date of the execution by any Person of any such instrument or writing may be proved by the affidavit of a witness of such execution or by the certificate of any notary public or other officer authorized by law to take acknowledgments of deeds, certifying that the individual signing such instrument or writing acknowledged to him the execution thereof. Whenever such execution is by an officer of a corporation or a member of a limited liability company or a partnership on behalf of such corporation, limited liability company or partnership, such certificate or affidavit shall also constitute sufficient proof of his authority.

(c) The ownership of Notes shall be proved by the Note Register.

85

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Section 12.04. Notices, Etc. Any request, demand, authorization, direction, notice, consent, waiver or act of Noteholders or other documents provided or permitted by this Indenture to be made upon, given or furnished to, or filed with:

(a) the Indenture Trustee by any Noteholder or by the Issuer, shall be in writing and shall be delivered personally or mailed by first-class registered or certified mail, postage prepaid, or by telephonic facsimile transmission and overnight delivery service, postage prepaid, and received by, a Responsible Officer of the Indenture Trustee at its Corporate Trust Office listed below; or

(b) any other Person shall be in writing and shall be delivered personally or by electronic or telephonic facsimile transmission and prepaid overnight delivery service at the address listed below or at any other address subsequently furnished in writing to the Indenture Trustee by the applicable Person.
To the Indenture Trustee: Wells Fargo Bank, National Association
600 S. 4th Street
MAC N9300-061
Minneapolis, MN 55479
Attention: Corporate Trust Services – Asset Backed Administration
Phone:
Fax:

To the Issuer: Sunrun Athena Issuer 2018-1, LLC
c/o Sunrun Inc.
595 Market Street
San Francisco, CA 94105
Attention: General Counsel

with a copy to: Sunrun Inc.
595 Market Street
San Francisco, CA 94105
Attention: General Counsel

To KBRA: Kroll Bond Rating Agency, Inc.
845 Third Avenue, 4th Floor
New York, NY 10022
Attention: ABS Surveillance
Email:

Notices delivered to the Rating Agency shall be by electronic delivery to the email address set forth above where information is available in electronic format. In addition, upon the written request of any beneficial owner of a Note, the Indenture Trustee shall provide to such beneficial owner copies of such notices, reports or other information delivered, in one or more of the means requested, by the Indenture Trustee hereunder to other Persons as such beneficial owner may reasonably request.

Section 12.05. Notices and Reports to Noteholders; Waiver of Notices.

(a) Where this Indenture provides for notice to Noteholders of any event or the mailing of any report to the Noteholders, such notice or report shall be written and shall be sufficiently given (unless otherwise herein expressly provided) if mailed, first-class, postage-prepaid, to each Noteholder affected by such event or to whom such report is required to be mailed or sent via electronic mail, at the address or electronic mail address of such Noteholder as it appears on the

87

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Note Register, not later than the latest date, and not earlier than the earliest date, prescribed for the giving of such notice or the mailing of such report. In any case where a notice or report to Noteholders is mailed in the manner provided above, neither the failure to mail such notice or report, nor any defect in any notice or report so mailed, to any particular Noteholder shall affect the sufficiency of such notice or report with respect to other Noteholders, and any notice or report which is mailed in the manner herein provided shall be conclusively presumed to have been duly given or provided.

(b) Where this Indenture provides for notice in any manner, such notice may be waived in writing by any Person entitled to receive such notice, either before or after the event, and such waiver shall be the equivalent of such notice. Waivers of notice by Noteholders shall be filed with the Indenture Trustee, but such filing shall not be a condition precedent to the validity of any action taken in reliance upon such waiver.

(c) If, by reason of the suspension of regular mail service as a result of a strike, work stoppage or similar activity, it shall be impractical to mail notice of any event to the Noteholders when such notice is required to be given pursuant to any provision of this Indenture, then any manner of giving such notice as shall be satisfactory to the Indenture Trustee shall be deemed to be a sufficient giving of such notice.

(d) The Indenture Trustee shall promptly upon written request furnish to each Noteholder each Quarterly Transaction Report and, unless directed to do so under any other provision of this Indenture or any other Transaction Document (in which case no request shall be necessary), a copy of all reports, financial statements and notices received by the Indenture Trustee pursuant to this Indenture and the other Transaction Documents, but only with the use of a password provided by the Indenture Trustee; provided, however, the Indenture Trustee shall have no obligation to provide such information described in this Section 12.05 until it has received the requisite information from the Issuer or the Transaction Manager. The Indenture Trustee will make no representation or warranties as to the accuracy or completeness of such documents and will assume no responsibility therefor. The Indenture Trustee’s internet website will initially be located at www.CTSLink.com or at such other address as the Indenture Trustee shall notify the parties to the Indenture from time to time. In connection with providing access to the Indenture Trustee’s website, the Indenture Trustee may require registration and the acceptance of a disclaimer. The Trustee shall not be liable for the dissemination of information in accordance with this Indenture.

Section 12.06. Rules by Indenture Trustee. The Indenture Trustee may make reasonable rules for any meeting of Noteholders.

Section 12.07. Issuer Obligation. Each of the Indenture Trustee and each Noteholder accepts that the enforceability against the Issuer under this Indenture and under the Notes shall be limited to the assets of the Issuer, whether tangible or intangible, real or personal (including the Trust Estate) and the proceeds thereof. No recourse may be taken, directly or indirectly, against (a) any member,

88

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manager, officer, employee, trustee, agent or director of the Issuer or of any predecessor of the Issuer, (b) any member, manager, beneficiary, officer, employee, trustee, agent, director or successor or assign of a holder of a member or limited liability company interest in the Issuer, or (c) any incorporator, subscriber to capital stock, stockholder, officer, director, employee or agent of the Indenture Trustee or any predecessor or successor thereof, with respect to the Issuer’s obligations with respect to the Notes or any of the statements, representations, covenants, warranties or obligations of the Issuer under this Indenture or any Note or other writing delivered in connection herewith or therewith.

Section 12.08. Enforcement of Benefits. The Indenture Trustee for the benefit of the Noteholders shall be entitled to enforce and, at the written direction of and with indemnity by the Super-Majority Noteholders of the Controlling Class, the Indenture Trustee shall enforce the covenants and agreements of the Transaction Manager contained in the Transaction Management Agreement, the Transaction Transition Manager contained in the Manager Transition Agreement, the Custodian contained in the Custodial Agreement, the Depositor contained in the Depositor Contribution Agreement, any Sunrun Party in any other Contribution Agreement, the Performance Guaranty contained in the Performance Guaranty and each other Transaction Document.

Section 12.09. Effect of Headings and Table of Contents. The Section and Section headings herein and the Table of Contents are for convenience only and shall not affect the construction hereof.

Section 12.10. Successors and Assigns. All covenants and agreements in this Indenture by the Issuer and the Indenture Trustee shall bind their respective successors and assigns, whether so expressed or not.

Section 12.11. Separability. If any provision in this Indenture or in the Notes shall be invalid, illegal or unenforceable, the validity, legality and enforceability of the remaining provisions shall not in any way be affected or impaired thereby. Furthermore, in lieu of such illegal, invalid or unenforceable provision, there shall be added automatically as part of this Indenture, a provision as similar in its terms and purpose to such illegal, invalid or unenforceable provision as may be possible and be legal, valid and enforceable.

Section 12.12. Benefits of Indenture. Nothing in this Indenture or in the Notes, expressed or implied, shall give to any Person, other than the parties hereto and their successors hereunder, any separate trustee or co-trustee appointed under Section 7.13 and the Noteholders, any benefit or any legal or equitable right, remedy or claim under this Indenture.

Section 12.13. Legal Holidays. If the date of any Payment Date or any other date on which principal of or interest on any Note is proposed to be paid or any date on which mailing of notices by the Indenture Trustee to any Person is required pursuant to any provision of this Indenture, shall

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not be a Business Day, then (notwithstanding any other provision of the Notes or this Indenture) payment or mailing of such notice need not be made on such date, but may be made or mailed on the next succeeding Business Day with the same force and effect as if made or mailed on the nominal date of any such Payment Date or other date for the payment of principal of or interest on any Note, or as if mailed on the nominal date of such mailing, as the case may be, and in the case of payments, no interest shall accrue for the period from and after any such nominal date, provided such payment is made in full on such next succeeding Business Day.

Section 12.14. Governing Law; Jurisdiction; Waiver of Jury Trial. (a) This Indenture and each Note shall be construed in accordance with and governed by the substantive laws of the State of New York (including New York General Obligations Laws §§ 5-1401 and 5-1402, but otherwise without regard to conflicts of law provisions thereof, except with regard to the UCC) applicable to agreements made and to be performed therein.

(b) The Parties hereto agree to the non-exclusive jurisdiction of the state and federal courts in New York.

(c) TO THE EXTENT PERMITTED BY APPLICABLE LAW, EACH PARTY HERETO AND EACH NOTEHOLDER BY ACCEPTANCE OF A NOTE IRREVOCABLY WAIVES ALL RIGHT OF TRIAL BY JURY IN ANY ACTION PROCEEDING OR COUNTERCLAIM BASED ON, OR ARISING OUT OF, UNDER OR IN CONNECTION WITH, THIS INDENTURE, ANY OTHER DOCUMENT IN CONNECTION HEREWITH OR ANY MATTER ARISING HEREUNDER OR THEREUNDER.

Section 12.15. Counterparts. This Indenture may be executed in any number of counterparts, each of which so executed shall be deemed to be an original, but all such counterparts shall together constitute but one and the same agreement. Delivery of an executed counterpart of this Indenture by facsimile or other electronic transmission (i.e., “pdf” or “tif”) shall be effective delivery of a manually executed counterpart hereof and deemed an original.

Section 12.16. Recording of Indenture. If this Indenture is subject to recording in any appropriate public recording offices, the Issuer shall effect such recording at its expense in compliance with an Opinion of Counsel to the effect that such recording is necessary either for the protection of the Noteholders or any other person secured hereunder or for the enforcement of any right or remedy granted to the Indenture Trustee under this Indenture or any other Transaction Document.

Section 12.17. Further Assurances. The Issuer agrees to do and perform, from time to time, any and all acts and to execute any and all further instruments required or reasonably requested by the Indenture Trustee to effect more fully the purposes of this Indenture, including, without limitation, the execution of any financing statements or continuation statements relating to the Trust Estate for filing under the provisions of the UCC of any applicable jurisdiction.

90

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Section 12.18. No Bankruptcy Petition Against the Issuer. The Indenture Trustee agrees (and each Noteholder by its acceptance of the Notes shall be deemed to agree) that, prior to the date that is one year and one day after the payment in full of all amounts payable with respect to the Notes, it will not institute against the Issuer, or join any other Person in instituting against the Issuer, any bankruptcy, reorganization, arrangement, insolvency or liquidation proceedings or other proceedings under the laws of the United States or any State of the United States. This Section 12.18 shall survive the termination of this Indenture.

Section 12.19. [Reserved].

Section 12.20. Liquidated Damages Demands. The Indenture Trustee will promptly notify the Issuer, the Transaction Manager and the Depositor of any demand by a Noteholder (or a beneficial owner thereof) made in writing to a Responsible Officer of the Indenture Trustee that the Depositor pay Liquidated Damages Amounts in respect of a Defective Solar Asset, whether on account of a breach of representation or warranty or otherwise. Other than forwarding Noteholder demands in accordance with this Section 12.20, the Indenture Trustee shall have no responsibility for compliance by the Issuer, the Transaction Manager or the Depositor with any reporting requirements under federal securities laws with respect to breaches of representations and warranties and shall not be required to determine whether or not such a breach has occurred or is material.

Section 12.21. [Reserved].

Section 12.22. Tax Treatment Disclosure. Any person (and each employee, representative, or other agent of such person) may disclose to any and all persons, without limitation of any kind, the tax treatment and tax structure of the transaction and all materials of any kind (including opinions or other tax analyses) that are provided to such person relating to such tax treatment and tax structure.

Section 12.23. Multiple Roles. The parties expressly acknowledge and consent to Wells Fargo Bank, National Association, acting in the multiple roles of Indenture Trustee, the Transaction Transition Manager and the Custodian. Wells Fargo Bank, National Association may, in such capacities, discharge its separate functions fully, without hindrance or regard to conflict of interest principles, or other breach of duties to the extent that any such conflict or breach arises from the performance by Wells Fargo Bank, National Association of express duties set forth in this Indenture in any of such capacities, all of which defenses, claims or assertions are hereby expressly waived by the other parties hereto except in the case of negligence (other than errors in judgment), bad faith or willful misconduct by Wells Fargo Bank, National Association.

Section 12.24. PATRIOT Act. The parties hereto acknowledge that in accordance with the Customer Identification Program (CIP) requirements established under the Uniting and Strengthening America by Providing Appropriate Tools Required to Intercept and Obstruct Terrorism Act of 2001, Title III of Pub. L. 107 56 (signed into law October 26, 2001) and its

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implementing regulations (collectively, the Patriot Act), the Indenture Trustee in order to help fight the funding of terrorism and money laundering, is required to obtain, verify, and record information that identifies each person or legal entity that establishes a relationship or opens an account with the Indenture Trustee. Each party hereby agrees that it shall provide the Indenture Trustee with such information as the Indenture Trustee may request from time to time in order to comply with any applicable requirements of the Patriot Act.

ARTICLE XIII

TERMINATION

Section 13.01. Termination of Indenture.

(a) This Indenture shall terminate on or after the Termination Date upon the payment to the Noteholders and the Indenture Trustee of all amounts required to be paid to them pursuant to this Indenture, and the conveyance and transfer of all right, title and interest in and to the property and funds in the Trust Estate to the Issuer. The Transaction Manager shall promptly notify the Indenture Trustee in writing of any prospective termination pursuant to this Article XIII.

(b) Notice of any prospective termination, specifying the Payment Date for payment of the final payment and requesting the surrender of the Notes for cancellation, shall be given promptly by the Indenture Trustee by letter to the Noteholders as of the applicable Record Date and the Rating Agency upon the Indenture Trustee receiving written notice of such event from the Issuer or the Transaction Manager. The Issuer or the Transaction Manager shall give such notice to the Indenture Trustee not later than the 5th day of the month of the final Payment Date stating (i) the Payment Date upon which final payment of the Notes shall be made, (ii) the amount of any such final payment, and (iii) the location for presentation and surrender of the Notes. Surrender of the Notes that are Definitive Notes shall be a condition of payment of such final payment.

[SIGNATURE PAGE Follows]

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IN WITNESS WHEREOF, the Issuer and the Indenture Trustee have caused this Indenture to be duly executed as of the day and year first above written.

SUNRUN ATHENA ISSUER 2018-1, LLC, as Issuer

By: Sunrun Athena Depositor 2018-1, LLC
Its: Sole Member

By: Sunrun Athena Investor 2018-1, LLC
Its: Sole Member

By: Sunrun Athena Holdco 2018-1, LLC
Its: Sole Member

By: Sunrun Inc.
Its: Sole Member
By /s/ Robert Komin, Jr.
Name: Robert Komin, Jr.
Title: Chief Financial Officer

WELLS FARGO BANK, NATIONAL ASSOCIATION, as Indenture Trustee

By /s/ Chad Schafer
Name: Chad Schafer
Title: Vice President

Agreed and Acknowledged:

SUNRUN INC.,
as Transaction Manager

By /s/ Robert Komin, Jr.
Name: Robert Komin, Jr.
Title: Chief Financial Officer

[Signature Page to Sunrun 2018-1 Indenture]

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### SCHEDULE I

**SCHEDULE OF SOLAR ASSETS**

**Sunrun Athena 2018-1**

Schedule of Solar Assets

As of September 30, 2018

<table>
<thead>
<tr>
<th>Contract ID</th>
<th>Project Company</th>
<th>County</th>
<th>City</th>
<th>State</th>
<th>Zip Code</th>
<th>Utility</th>
<th>FICO Score</th>
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<tbody>
<tr>
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<table>
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<tr>
<th>In-Service Date (PTO)</th>
<th>System Size</th>
<th>Panel Manufacturer</th>
<th>Inverter Manufacturer</th>
<th>Battery Manufacturer</th>
<th>Number Batteries</th>
<th>Sunrun Installed</th>
<th>Sunrun Originated</th>
</tr>
</thead>
<tbody>
<tr>
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<tr>
<th>Product</th>
<th>Contract Type</th>
<th>Product Type</th>
<th>Agreement Term (Years)</th>
<th>Remaining Term of Agreement (Months)</th>
<th>Seasoning / # of Months Since PTO</th>
<th>First Payment Due Date</th>
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<td>[***]</td>
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<table>
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<tr>
<th>Last Payment Due Date</th>
<th>Next Payment Due Date</th>
<th>Year 1 Monthly Payment</th>
<th>Stepdown</th>
<th>Monthly Payment After Stepdown (If Applicable)</th>
<th>Stepdown Payment Adjust Date</th>
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</table>

<table>
<thead>
<tr>
<th>Year 1 Implied Price per kWh</th>
<th>Annual Escalator</th>
<th>ACH Payment (Y/N)</th>
<th>Contracted Year 1 Production</th>
<th>PBI Term (years)</th>
<th>PBI Rate</th>
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<tbody>
<tr>
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</tbody>
</table>

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SCHEDULE II

SCHEDULED HOST CUSTOMER PAYMENTS
[On file with the Indenture Trustee]

II-1

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SCHEDULE III

SCHEDULED PBI PAYMENTS
[On file with the Indenture Trustee]

III-1

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## SCHEDULE IV

### SCHEDULED OUTSTANDING NOTE BALANCE

<table>
<thead>
<tr>
<th>Payment Date</th>
<th>Class A Scheduled Outstanding Note Balance ($)</th>
<th>Class B Scheduled Outstanding Note Balance ($)</th>
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<tbody>
<tr>
<td>Closing Date</td>
<td>[***]</td>
<td>[***]</td>
</tr>
<tr>
<td>January 2019</td>
<td>[***]</td>
<td>[***]</td>
</tr>
<tr>
<td>April 2019</td>
<td>[***]</td>
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<td>July 2019</td>
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<td>[***]</td>
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<td>October 2019</td>
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<td>April 2020</td>
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IV-2

[***] = Certain confidential information contained in this document, marked by brackets, is filed with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.
<table>
<thead>
<tr>
<th>Year</th>
<th>Tax Equity Investor Distributions (S)</th>
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<td>[***]</td>
</tr>
<tr>
<td>2020</td>
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<tr>
<td>2037</td>
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</table>
Total

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EXHIBIT A-1

FORM OF CLASS A NOTE

Note Number: [___]

UNLESS THIS GLOBAL NOTE IS PRESENTED BY AN AUTHORIZED REPRESENTATIVE OF THE DEPOSITORY TRUST COMPANY, A NEW YORK CORPORATION ("DTC"), TO THE ISSUER OR ITS AGENT FOR REGISTRATION OF TRANSFER, EXCHANGE OR PAYMENT, AND ANY GLOBAL NOTE ISSUED IS REGISTERED IN THE NAME OF CEDE & CO. OR SUCH OTHER NAME AS IS REQUESTED BY AN AUTHORIZED REPRESENTATIVE OF DTC (AND ANY PAYMENT IS MADE TO CEDE & CO. OR TO SUCH OTHER ENTITY AS IS REQUESTED BY AN AUTHORIZED REPRESENTATIVE OF DTC) ANY TRANSFER, PLEDGE OR OTHER USE HEREOF FOR VALUE OR OTHERWISE BY OR TO ANY PERSON IS WRONGFUL INASMUCH AS THE REGISTERED OWNER HEREOF, CEDE & CO., HAS AN INTEREST HEREIN.

TRANSFERS OF THIS GLOBAL NOTE SHALL BE LIMITED TO TRANSFERS IN WHOLE, BUT NOT IN PART, TO NOMINEES OF DTC OR TO A SUCCESSOR THEREOF OR SUCH SUCCESSOR’S NOMINEE AND TRANSFERS OF PORTIONS OF THIS GLOBAL NOTE SHALL BE LIMITED TO TRANSFERS MADE IN ACCORDANCE WITH THE RESTRICTIONS SET FORTH IN THE INDENTURE REFERRED TO HEREIN.

THIS GLOBAL NOTE (OR ITS PREDECESSOR) WAS ORIGINALLY ISSUED IN A TRANSACTION EXEMPT FROM REGISTRATION UNDER THE UNITED STATES SECURITIES ACT OF 1933, AS AMENDED (THE "SECURITIES ACT"), AND NEITHER THIS GLOBAL NOTE NOR ANY INTEREST HEREIN MAY BE OFFERED, SOLD OR OTHERWISE TRANSFERRED IN THE ABSENCE OF SUCH REGISTRATION OR AN APPLICABLE EXEMPTION THEREFROM. EACH PURCHASER OF THIS GLOBAL NOTE OR ANY INTEREST HEREIN IS HEREBY NOTIFIED THAT THE SELLER OF THIS GLOBAL NOTE OR INTEREST HEREIN MAY BE RELYING ON THE EXEMPTION FROM THE PROVISIONS OF SECTION 5 OF THE SECURITIES ACT PROVIDED BY RULE 144A THEREUNDER.

THE HOLDER OF THIS GLOBAL NOTE OR ANY INTEREST HEREIN AGREES FOR THE BENEFIT OF THE ISSUER THAT (A) THIS NOTE AND ANY INTEREST HEREIN MAY NOT BE OFFERED, RESOLD, PLEDGED OR OTHERWISE TRANSFERRED IN DENOMINATIONS LOWER THAN $100,000 AND IN INTEGRAL MULTIPLES OF $1,000 IN EXCESS THEREOF, AND ONLY (I) IN THE UNITED STATES TO A PERSON WHOM THE SELLER REASONABLY BELIEVES IS A QUALIFIED INSTITUTIONAL BUYER (AS DEFINED IN RULE 144A UNDER THE SECURITIES ACT) IN A TRANSACTION MEETING THE REQUIREMENTS OF RULE 144A, (II) OUTSIDE THE UNITED STATES IN AN

A-1-1

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OFFSHORE TRANSACTION IN ACCORDANCE WITH REGULATION S, OR (III) PURSUANT TO ANOTHER EXEMPTION FROM
REGISTRATION UNDER THE SECURITIES ACT (IF AVAILABLE AND EVIDENCED BY AN OPINION OF COUNSEL
ACCEPTABLE TO THE ISSUER AND THE INDENTURE TRUSTEE), IN EACH OF CASES (I) THROUGH (III) IN ACCORDANCE
WITH ANY APPLICABLE SECURITIES LAWS OF ANY STATE OF THE UNITED STATES AND ANY OTHER APPLICABLE
JURISDICTION, AND (B) THE HOLDER WILL, AND EACH SUBSEQUENT HOLDER IS REQUIRED TO, NOTIFY ANY
PURCHASER OF THIS GLOBAL NOTE OR ANY INTEREST HEREIN FROM IT OF THE RESALE RESTRICTIONS REFERRED TO
ABOVE. NOTWITHSTANDING THE FOREGOING RESTRICTION, ANY NOTE THAT HAS BEEN PROPERLY ISSUED IN AN
AMOUNT NO LESS THAN $100,000 MAY BE OFFERED, RESOLD, PLEDGED OR OTHERWISE TRANSFERRED IN
DENOMINATIONS LESS THAN $100,000 IF SUCH LESSER DENOMINATION IS SOLELY A RESULT OF A REDUCTION IN
PRINCIPAL DUE TO PAYMENTS MADE IN ACCORDANCE WITH THIS INDENTURE.

FOR REGULATION S TEMPORARY GLOBAL NOTE, ADD THE FOLLOWING:

THIS GLOBAL NOTE IS A TEMPORARY GLOBAL NOTE FOR PURPOSES OF REGULATION S UNDER THE SECURITIES
ACT WHICH IS EXCHANGEABLE FOR A REGULATION S PERMANENT GLOBAL NOTE SUBJECT TO THE TERMS AND
CONDITIONS SET FORTH HEREIN AND IN THE INDENTURE REFERRED TO HEREIN.]

THE PURCHASER UNDERSTANDS THAT THE ISSUER MAY RECEIVE A LIST OF PARTICIPANTS HOLDING POSITIONS
IN THE NOTES FROM THE SECURITIES DEPOSITORY.

SECTIONS 2.07 AND 2.08 OF THE INDENTURE CONTAIN FURTHER RESTRICTIONS ON THE TRANSFER AND RESALE
OF THIS NOTE. EACH TRANSFEREE OF THIS NOTE, BY ACCEPTANCE HEREOF, IS DEEMED TO HAVE ACCEPTED THIS
NOTE SUBJECT TO THE FOREGOING RESTRICTIONS ON TRANSFERABILITY.

EACH NOTEHOLDER OR NOTE OWNER, BY ITS ACCEPTANCE OF THIS NOTE (OR INTEREST THEREIN), COVENANTS
AND AGREES THAT SUCH NOTEHOLDER OR NOTE OWNER, AS THE CASE MAY BE, SHALL NOT, PRIOR TO THE DATE
THAT IS ONE YEAR AND ONE DAY AFTER THE TERMINATION OF THE INDENTURE, ACQUIESCE, PETITION OR
OTHERWISE INVoke OR CAUSE THE ISSUER TO INVoke THE PROCESS OF ANY COURT OR GOVERNMENTAL AUTHORITY
FOR THE PURPOSE OF COMMENCING OR SUSTAINING A CASE AGAINST THE ISSUER UNDER ANY FEDERAL OR STATE
BANKRUPTCY, INSOLVENCY, REORGANIZATION OR SIMILAR LAW OR APPOINTING A RECEIVER, LIQUIDATOR,
ASSIGNEE, INDENTURE TRUSTEE, CUSTODIAN, SEQUESTRATOR OR OTHER SIMILAR OFFICIAL OF THE ISSUER OR ANY

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SUBSTANTIAL PART OF ITS PROPERTY, OR ORDERING THE WINDING UP OR LIQUIDATION OF THE AFFAIRS OF THE
ISSUER. THE PRINCIPAL OF THIS NOTE IS PAYABLE IN INSTALLMENTS AS SET FORTH HEREIN. ACCORDINGLY, THE
OUTSTANDING PRINCIPAL AMOUNT OF THIS NOTE AT ANY TIME MAY BE LESS THAN THE AMOUNT SHOWN ON THE
FACE HEREOF. ANY PERSON ACQUIRING THIS SECURITY MAY ASCERTAIN ITS CURRENT PRINCIPAL AMOUNT BY
INQUIRY OF THE INDENTURE TRUSTEE.

A-1-3

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Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.
SUNRUN ATHENA ISSUER 2018-1, LLC
SOLAR ASSET BACKED NOTES, SERIES 2018-1
CLASS A NOTE

GLOBAL NOTE

Original Issue date       Rated Final Maturity       Issue Price
December 20, 2018         April 30, 2049           98.525084%

REGISTERED OWNER: CEDE & CO.
INITIAL PRINCIPAL BALANCE: $322,000,000
CUSIP No. [86772D AA4][U86789 AA9]
ISIN No. [US86772DAA46][USU86789AA98]

THIS CERTIFIES THAT Sunrun Athena Issuer 2018-1, LLC, a Delaware limited liability company (hereinafter called the “Issuer”), which term includes any successor entity under the Indenture, dated as of December 20, 2018 (the “Indenture”), between the Issuer and Wells Fargo Bank, National Association, as indenture trustee (together with any successor thereto, hereinafter called the “Indenture Trustee”), for value received, hereby promises to pay to the Registered Owner named above or registered assigns, subject to the provisions hereof and of the Indenture, (A) interest based on the Interest Accrual Period at the applicable Note Rate defined in the Indenture, on each Payment Date beginning in January 2019 (or, if such day is not a Business Day, the next succeeding Business Day), and (B) principal on each Payment Date in the manner and subject to the Priority of Payments as set forth in the Indenture; provided, however, that the Notes are subject to prepayment and redemption as set forth in the Indenture. This note (this “Class A Note”) is one of a duly authorized series of Class A Notes of the Issuer designated as its Sunrun Athena Issuer 2018-1, LLC, 5.31% Solar Asset Backed Notes, Series 2018-1, Class A (the “Class A Notes”). The Indenture authorizes the issuance of $322,000,000 in Outstanding Note Balance of Class A Notes and $56,500,000 in Outstanding Note Balance of Sunrun Athena Issuer 2018-1, LLC, 7.50% Solar Asset Backed Notes, Series 2018-1, Class B (the “Class B Notes” and together with the Class A Notes, the “Notes”). The Indenture provides that the Notes will be entitled to receive payments in reduction of the Outstanding Note Balance, in the amounts, from the sources, and at the times more specifically as set forth in the Indenture. The Notes are secured by the Trust Estate (as defined in the Indenture).

Reference is hereby made to the Indenture and all indentures supplemental thereto for a statement of the respective rights thereunder of the Issuer, the Indenture Trustee and the Holders of

A-1-4

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the Notes and the terms upon which the Notes are to be authenticated and delivered. All terms used in this Note which are not defined herein shall have the meanings assigned to them in the Indenture.

THE OBLIGATION OF THE ISSUER TO REPAY THE NOTES IS A LIMITED, NONRECOURSE OBLIGATION SECURED ONLY BY THE TRUST ESTATE. All payments of principal of and interest on the Class A Notes shall be made only from the Trust Estate, and each Noteholder and each Note Owner hereof, by its acceptance of this Class A Note, agrees that it shall be entitled to payments solely from such Trust Estate pursuant to the terms of the Indenture. The actual Outstanding Note Balance on this Class A Note may be less than the principal balance indicated on the face hereof. The actual Outstanding Note Balance on this Class A Note at any time may be obtained from the Indenture Trustee.

With respect to payment of principal of and interest on the Class A Notes, the Indenture provides the following:

(a) Until fully paid, principal payments on the Class A Notes will be made on each Payment Date in an amount, at the time, and in the manner provided in the Indenture; provided, however, that the Notes are subject to prepayment and redemption as set forth in the Indenture. The Outstanding Note Balance of each Class A Note shall be payable no later than the Rated Final Maturity thereof unless the Outstanding Note Balance of such Class A Note becomes due and payable at an earlier date pursuant to the Indenture, and in each case such payment shall be made in an amount and in the manner provided in the Indenture.

(b) The Class A Notes shall bear interest on the Outstanding Note Balance of the Class A Notes and accrued but unpaid interest thereon, at the applicable Note Rate. The Note Interest with respect to the Class A Notes shall be payable on each Payment Date to the extent that the Collection Account then contains sufficient amounts to pay such Note Interest pursuant to Section 5.05 of the Indenture. Note Interest will accrue on the basis of a 360-day year consisting of twelve 30-day months.

All payments of interest and principal on the Class A Notes on the applicable Payment Date shall be paid to the Person in whose name such Class A Note is registered at the close of business on the Record Date for such Payment Date in the manner provided in the Indenture. All reductions in the Outstanding Note Balance of a Class A Note (or one or more Predecessor Notes) effected by full or partial payments of installments of principal shall be binding upon all past, then current, and future Holders of such Class A Note and of any Class A Note issued upon the registration of transfer thereof or in exchange therefor or in lieu thereof, whether or not such payment is noted on such Class A Note.

The Rated Final Maturity of the Notes is the Payment Date in April 2049 unless the Notes are earlier prepaid or redeemed in whole or accelerated pursuant to the Indenture. The Indenture

A-1-5

[***] = Certain confidential information contained in this document, marked by brackets, is filed with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.
Trustee shall pay to each Class A Noteholder of record on the preceding Record Date either (i) by wire transfer, in immediately available funds to the account of such Class A Noteholder at a bank or other entity having appropriate facilities therefor, if such Class A Noteholder shall have provided to the Indenture Trustee appropriate written instructions at least five Business Days prior to the related Payment Date (which instructions may remain in effect for subsequent Payment Dates unless revoked by the Class A Noteholder), or (ii) if not, by check mailed to such Class A Noteholder at the address of such Class A Noteholder appearing in the Note Register, the amounts to be paid to such Class A Noteholder pursuant to such Class A Noteholder’s Notes; provided, that so long as the Class A Notes are registered in the name of the Securities Depository such payments shall be made to the nominee thereof in immediately available funds.

**THE CLASS A NOTES SHALL BE SUBJECT TO VOLUNTARY PREPAYMENT OR OPTIONAL REDEMPTION AT THE OPTION OF THE ISSUER IN THE MANNER AND SUBJECT TO THE PROVISIONS OF THE INDENTURE.** Whenever by the terms of the Indenture, the Indenture Trustee is required to prepay or redeemed the Class A Notes, and subject to and in accordance with the terms of Article VI of the Indenture, the Indenture Trustee shall give notice of the prepayment or redemption in the manner prescribed by the Indenture.

Subject to certain restrictions contained in the Indenture, (i) the Class A Notes are issuable in the minimum denomination of $100,000 and in integral multiples of $1,000 in excess thereof (provided, that one Class A Note may be issued in an additional amount equal to any remaining portion of the Initial Outstanding Note Balance) and (ii) the Class A Notes may be exchanged for a like aggregate principal amount of Class A Notes of authorized denominations of the same maturity.

The final payment on any Definitive Note shall be made only upon presentation and surrender of the Note at the Corporate Trust Office of the Indenture Trustee.

The Class A Noteholders shall have no right to enforce the provisions of the Indenture or to institute action to enforce the covenants therein, or to take any action with respect to any Event of Default, or to institute, appear in or defend any suit or other proceedings with respect thereto, except as provided in the Indenture.

The Class A Notes may be exchanged, and their transfer may be registered, by the Noteholders in person or by their attorneys duly authorized in writing at the Corporate Trust Office of the Indenture Trustee only in the manner, subject to the limitations provided in the Indenture, and upon surrender and cancellation of the Class A Notes. Upon exchange or registration of such transfer, a new registered Class A Note or Notes evidencing the same outstanding principal amount will be executed in exchange therefor.

All amounts collected as payments on the Trust Estate or otherwise shall be applied in the order of priority specified in the Indenture.

A-1-6

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Each Person who has or who acquires any Ownership Interest in a Class A Note shall be deemed by the acceptance or acquisition of such Ownership Interest to have agreed to be bound by the provisions of the Indenture. A Noteholder may not sell, offer for sale, assign, pledge, hypothecate or otherwise transfer or encumber all or any part of its interest in the Class A Notes except pursuant to an effective registration statement covering such transaction under the Securities Act of 1933, as amended, and effective qualification or registration under all applicable State securities laws and regulations or under an exemption from registration under said Securities Act and said State securities laws and regulations.

[Add the following for Rule 144A Global Notes:

Interests in this Class A Note may be exchanged for an interest in the corresponding Regulation S Temporary Global Note or Regulation S Global Note, in each case subject to the restrictions specified in the Indenture.]

[Add the following for Regulation S Temporary Global Notes:

Interests in this Class A Note may be exchanged for an interest in the corresponding Rule 144A Global Note, subject to the restrictions specified in the Indenture.

On or after the 40th day after the later of the Closing Date and the commencement of the offering of the Notes, interests in this Regulation S Temporary Global Note may be exchanged (free of charge) for interests in a Regulation S Permanent Global Note. The Regulation S Permanent Global Note shall be so issued and delivered in exchange for only that portion of this Regulation S Temporary Global Note in respect of which there shall have been presented to DTC by Euroclear or Clearstream a certification to the effect that it has received from or in respect of a person entitled to an interest (as shown by its records) a certification that the beneficial interests in such Regulation S Temporary Global Note are owned by persons who are not U.S. persons (as defined in Regulation S).

[Add the following for Regulation S Permanent Global Notes:

Interests in this Class A Note may be exchanged for an interest in the corresponding Rule 144A Global Note, subject to the restrictions specified in the Indenture.

In addition, each Person who has or who acquires any Ownership Interest in a Class A Note shall be deemed by the acceptance or acquisition of such Ownership Interest to have agreed to be bound by the provisions of Section 12.18 of the Indenture. Prior to the date that is one year and one day after the payment in full of all amounts payable with respect to the Class A Notes, each Person who has or acquires an Ownership Interest in a Class A Note agrees that such Person will not institute against the Issuer, or join any other Person in instituting against the Issuer, any bankruptcy, reorganization, arrangement, insolvency or liquidation proceedings or other

A-1-7

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proceedings under the laws of the United States or any State of the United States. This covenant shall survive the termination of the Indenture.

Before the due presentment for registration of transfer of this Class A Note, the Issuer, the Indenture Trustee and any agent of the Issuer or the Indenture Trustee may treat the person in whose name this Class A Note is registered (i) on any Record Date for purposes of making payments, and (ii) on any other date for any other purpose, as the owner hereof, whether or not this Class A Note be overdue, and neither the Issuer, the Indenture Trustee nor any such agent shall be affected by notice to the contrary.

The Indenture permits the amendment thereof for the purpose of adding any provisions to, or changing in any manner or eliminating any of the provisions of, the Indenture or of modifying in any manner the rights of the Noteholders under the Indenture at any time by the Issuer and the Indenture Trustee (and, in some cases, only with the consent of the Noteholder affected thereby) and compliance with certain other conditions. Any such consent by the Holder, at the time of the giving thereof, of this Class A Note (or any one or more Predecessor Notes) shall be conclusive and binding upon such Holder and upon all future Holders of this Class A Note and of any Class A Note issued upon the registration of transfer hereof or in exchange hereof or in lieu hereof whether or not notation of such consent or waiver is made upon this Class A Note.

The Class A Notes and all obligations with respect thereto, including obligations under the Indenture, will be limited recourse obligations of the Issuer payable solely from the Trust Estate. Neither the Issuer, the Depositor, the Transaction Manager, the Transaction Transition Manager, the Custodian, the Note Registrar, the Indenture Trustee in its individual capacity or in its capacity as Indenture Trustee, nor any of their respective Affiliates, agents, partners, beneficiaries, officers, directors, stockholders, stockholders of partners, employees or successors or assigns, shall be personally liable for any amounts payable, or performance due, under the Notes or the Indenture. Without limiting the foregoing, each Holder of any Class A Note by its acceptance thereof, and the Indenture Trustee, shall be deemed to have agreed (i) that it shall look only to the Trust Estate to satisfy the Issuer’s obligations under or with respect to a Class A Note or the Indenture, including but not limited to liabilities under Article V of the Indenture and liabilities arising (whether at common law or equity) from breaches by the Issuer of any obligations, covenants and agreements herein or, to the extent enforceable, for any violation by the Issuer of applicable State or federal law or regulation, provided that, the Issuer shall not be relieved of liability hereunder with respect to any misrepresentation in the Indenture or any Transaction Document, or fraud, of the Issuer, and (ii) to waive any rights it may have to obtain a deficiency or other monetary judgment against either the Issuer or any of its principals, directors, officers, beneficial owners, employees or agents (whether disclosed or undisclosed) or their respective assets (other than the Trust Estate). The foregoing provisions of this paragraph shall not (i) prevent recourse to the Trust Estate or any Person (other than the Issuer) for the sums due or to become due under any security, instrument or agreement

A-1-8

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which is part of the Trust Estate, (ii) constitute a waiver, release or discharge of any indebtedness or obligation evidenced by the Class A Notes or secured by the Indenture, but the same shall continue until paid or discharged, or (iii) prevent the Indenture Trustee from exercising its rights with respect to the Grant, pursuant to the Indenture, of the Issuer’s rights under the Transaction Documents. It is further understood that the foregoing provisions of this paragraph shall not limit the right of any Person to name the Indenture Trustee in its capacity as Indenture Trustee under the Indenture or the Issuer as a party defendant in any action or suit or in the exercise of any remedy under the Notes or the Indenture, so long as no judgment in the nature of a deficiency judgment or seeking personal liability shall be asked for or (if obtained) enforced. It is expressly understood that all such liability is hereby expressly waived and released to the extent provided herein as a condition of, and as a consideration for, the execution of the Indenture and the issuance of the Notes.

The remedies of the Holder of this Class A Note as provided herein, in the Indenture or in the other Transaction Documents, shall be cumulative and concurrent and may be pursued solely against the assets of the Trust Estate. No failure on the part of the Noteholder in exercising any right or remedy hereunder shall operate as a waiver or release thereof, nor shall any single or partial exercise of any such right or remedy preclude any other further exercise thereof or the exercise of any other right or remedy hereunder.

The Class A Notes are issuable only in registered form in denominations as provided in the Indenture and subject to certain limitations therein set forth. At the option of the Class A Noteholder, Class A Notes may be exchanged for Class A Notes of like terms, in any authorized denominations and of like aggregate principal amount, upon surrender of the Notes to be exchanged at the Corporate Trust Office of the Indenture Trustee, subject to the terms and conditions of the Indenture.

Reference is hereby made to the Indenture, a copy of which is on file with the Indenture Trustee, for the provisions, among others, with respect to (i) the nature and extent of the rights, duties and obligations of the Indenture Trustee, the Issuer and the Class A Noteholders; (ii) the terms upon which the Class A Notes are executed and delivered; (iii) the collection and disposition of payments or proceeds in respect of the Conveyed Property; (iv) a description of the Trust Estate; (v) the modification or amendment of the Indenture; (vi) other matters; and (vii) the definition of capitalized terms used in this Class A Note that are not defined herein; to all of which the Class A Noteholders and Note Owners assent by the acceptance of the Class A Notes.

THIS CLASS A NOTE IS ISSUED PURSUANT TO THE INDENTURE AND IT AND THE INDENTURE SHALL BE GOVERNED BY AND CONSTRUED IN ACCORDANCE WITH THE LAWS OF THE STATE OF NEW YORK AND THE OBLIGATIONS, RIGHTS AND REMEDIES OF THE PARTIES HEREUNDER SHALL BE DETERMINED IN ACCORDANCE WITH SUCH LAWS (INCLUDING, WITHOUT LIMITATION, §5-1401 AND §5-1402 OF THE GENERAL OBLIGATIONS LAW OF THE STATE OF NEW YORK,

A-1-9

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BUT OTHERWISE WITHOUT GIVING EFFECT TO PRINCIPLES OF CONFLICTS OF LAWS).

REFERENCE IS HEREBY MADE TO THE PROVISIONS OF THE INDENTURE AND SUCH PROVISIONS ARE HEREBY INCORPORATED BY REFERENCE AS IF FULLY SET FORTH HEREIN.

Unless the certificate of authentication hereon has been executed by the Indenture Trustee by manual signature, this Class A Note shall not be entitled to any benefit under the Indenture or be valid or obligatory for any purpose.

A-1-10

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IN WITNESS WHEREOF, the Issuer has caused this instrument to be duly executed as of the date set forth below.

SUNRUN ATHENA ISSUER 2018-1, LLC, as Issuer
By: Sunrun Athena Depositor 2018-1, LLC
Its: Sole Member
By: Sunrun Athena Investor 2018-1, LLC
Its: Sole Member
By: Sunrun Athena Holdco 2018-1, LLC
Its: Sole Member
By: Sunrun Inc.
Its: Sole Member
By __

A-1-11

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INDENTURE TRUSTEE’S CERTIFICATE OF AUTHENTICATION

This is one of the Class A Notes referred to in the within-mentioned Indenture.

Dated:

WELLS FARGO BANK, NATIONAL ASSOCIATION,
asIndenture Trustee

By __
   Name: __
   Title: __

A-1-12

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[FORM OF ASSIGNMENT]

FOR VALUE RECEIVED, the undersigned hereby sells, assigns and transfers unto

(PLEASE INSERT SOCIAL SECURITY OR
TAXPAYER IDENTIFICATION NUMBER
OF ASSIGNEE)

______________________________________________________________________________
(Please Print or Typewrite Name and Address of Assignee)

______________________________________________________________________________

the within Note, and all rights thereunder, and hereby does irrevocably constitute and appoint

______________________________________________________________________________

Attorney to transfer the within Note on the books kept for registration thereof, with full power of substitution in the premises.

Date: _________________

Signature Guaranteed:

NOTICE: The signature to this assignment must correspond with the name as it appears upon
the face of the within Note in every particular, without alteration or enlargement or any change
whatever. The signature should be guaranteed by a guarantor institution participating in the
Securities Transfer Agents Medallion Program or in such other guarantee program acceptable
to the Indenture Trustee.

A-1-13

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EXHIBIT A-2

FORM OF CLASS B NOTE

Note Number: [__]

UNLESS THIS GLOBAL NOTE IS PRESENTED BY AN AUTHORIZED REPRESENTATIVE OF THE DEPOSITORY TRUST COMPANY, A NEW YORK CORPORATION ("DTC"), TO THE ISSUER OR ITS AGENT FOR REGISTRATION OF TRANSFER, EXCHANGE OR PAYMENT, AND ANY GLOBAL NOTE ISSUED IS REGISTERED IN THE NAME OF CEDE & CO. OR SUCH OTHER NAME AS IS REQUESTED BY AN AUTHORIZED REPRESENTATIVE OF DTC (AND ANY PAYMENT IS MADE TO CEDE & CO. OR TO SUCH OTHER ENTITY AS IS REQUESTED BY AN AUTHORIZED REPRESENTATIVE OF DTC) ANY TRANSFER, PLEDGE OR OTHER USE HEREOF FOR VALUE OR OTHERWISE BY OR TO ANY PERSON IS WRONGFUL INASMUCH AS THE REGISTERED OWNER HEREOF, CEDE & CO., HAS AN INTEREST HEREIN.

TRANSFERS OF THIS GLOBAL NOTE SHALL BE LIMITED TO TRANSFERS IN WHOLE, BUT NOT IN PART, TO NOMINEES OF DTC OR TO A SUCCESSOR THEREOF OR SUCH SUCCESSOR’S NOMINEE AND TRANSFERS OF PORTIONS OF THIS GLOBAL NOTE SHALL BE LIMITED TO TRANSFERS MADE IN ACCORDANCE WITH THE RESTRICTIONS SET FORTH IN THE INDENTURE REFERRED TO HEREIN.

THIS GLOBAL NOTE (OR ITS PREDECESSOR) WAS ORIGINALLY ISSUED IN A TRANSACTION EXEMPT FROM REGISTRATION UNDER THE UNITED STATES SECURITIES ACT OF 1933, AS AMENDED (THE "SECURITIES ACT"), AND NEITHER THIS GLOBAL NOTE NOR ANY INTEREST HEREIN MAY BE OFFERED, SOLD OR OTHERWISE TRANSFERRED IN THE ABSENCE OF SUCH REGISTRATION OR AN APPLICABLE EXEMPTION THEREFROM. EACH PURCHASER OF THIS GLOBAL NOTE OR ANY INTEREST HEREIN IS HEREBY NOTIFIED THAT THE SELLER OF THIS NOTE OR ANY INTEREST HEREIN MAY BE RELYING ON THE EXEMPTION FROM THE PROVISIONS OF SECTION 5 OF THE SECURITIES ACT PROVIDED BY RULE 144A THEREUNDER.

THE HOLDER OF THIS GLOBAL NOTE OR ANY INTEREST HEREIN AGREES FOR THE BENEFIT OF THE ISSUER THAT (A) THIS NOTE AND ANY INTEREST HEREIN MAY NOT BE OFFERED, RESOLD, PLEDGED OR OTHERWISE TRANSFERRED IN DENOMINATIONS LOWER THAN $750,000 AND IN INTEGRAL MULTIPLES OF $1,000 IN EXCESS THEREOF, AND ONLY (I) IN THE UNITED STATES TO A PERSON WHOM THE SELLER REASONABLY BELIEVES IS A QUALIFIED INSTITUTIONAL BUYER (AS DEFINED IN RULE 144A UNDER THE SECURITIES ACT) IN A TRANSACTION MEETING THE REQUIREMENTS OF RULE 144A, (II) OUTSIDE THE UNITED STATES IN AN OFFSHORE TRANSACTION IN ACCORDANCE WITH REGULATION S, OR (III) PURSUANT TO ANOTHER EXEMPTION FROM REGISTRATION UNDER THE SECURITIES ACT (IF AVAILABLE AND EVIDENCED BY AN OPINION OF COUNSEL).

A-2-1

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ACCEPTABLE TO THE ISSUER AND THE INDENTURE TRUSTEE), IN EACH OF CASES (I) THROUGH (III) IN ACCORDANCE WITH ANY APPLICABLE SECURITIES LAWS OF ANY STATE OF THE UNITED STATES AND ANY OTHER APPLICABLE JURISDICTION, AND (B) THE HOLDER WILL, AND EACH SUBSEQUENT HOLDER IS REQUIRED TO, NOTIFY ANY PURCHASER OF THIS GLOBAL NOTE OR ANY INTEREST HEREIN FROM IT OF THE RESALE RESTRICTIONS REFERRED TO IN (A) ABOVE. NOTWITHSTANDING THE FOREGOING RESTRICTION, ANY NOTE THAT HAS BEEN PROPERLY ISSUED IN AN AMOUNT NO LESS THAN $750,000 MAY BE OFFERED, RESOLD, PLEDGED OR OTHERWISE TRANSFERRED IN DENOMINATIONS LESS THAN $750,000 IF SUCH LESSER DENOMINATION IS SOLELY A RESULT OF A REDUCTION IN PRINCIPAL DUE TO PAYMENTS MADE IN ACCORDANCE WITH THIS INDENTURE.

[FOR REGULATION S TEMPORARY GLOBAL NOTE, ADD THE FOLLOWING:]

THIS GLOBAL NOTE IS A TEMPORARY GLOBAL NOTE FOR PURPOSES OF REGULATION S UNDER THE SECURITIES ACT WHICH IS EXCHANGEABLE FOR A REGULATION S PERMANENT GLOBAL NOTE SUBJECT TO THE TERMS AND CONDITIONS SET FORTH HEREIN AND IN THE INDENTURE REFERRED TO HEREIN.]

THE PURCHASER UNDERSTANDS THAT THE ISSUER MAY RECEIVE A LIST OF PARTICIPANTS HOLDING POSITIONS IN THE NOTES FROM THE SECURITIES DEPOSITORY.

SECTIONS 2.07 AND 2.08 OF THE INDENTURE CONTAIN FURTHER RESTRICTIONS ON THE TRANSFER AND RESALE OF THIS NOTE. EACH TRANSFEREE OF THIS NOTE, BY ACCEPTANCE HEREOF, IS DEEMED TO HAVE ACCEPTED THIS NOTE SUBJECT TO THE FOREGOING RESTRICTIONS ON TRANSFERABILITY.

EACH NOTEHOLDER OR NOTE OWNER, BY ITS ACCEPTANCE OF THIS NOTE (OR INTEREST THEREIN), COVENANTS AND AGREES THAT SUCH NOTEHOLDER OR NOTE OWNER, AS THE CASE MAY BE, SHALL NOT, PRIOR TO THE DATE THAT IS ONE YEAR AND ONE DAY AFTER THE TERMINATION OF THE INDENTURE, ACQUIESCE, PETITION OR OTHERWISE INVOCHE OR CAUSE THE ISSUER TO INVOCHE THE PROCESS OF ANY COURT OR GOVERNMENTAL AUTHORITY FOR THE PURPOSE OF COMMENCING OR SUSTAINING A CASE AGAINST THE ISSUER UNDER ANY FEDERAL OR STATE BANKRUPTCY, INSOLVENCY, REORGANIZATION OR SIMILAR LAW OR APPOINTING A RECEIVER, LIQUIDATOR, ASSIGNEE, INDENTURE TRUSTEE, CUSTODIAN, SEQUESTRATOR OR OTHER SIMILAR OFFICIAL OF THE ISSUER OR ANY SUBSTANTIAL PART OF ITS PROPERTY, OR ORDERING THE WINDING UP OR LIQUIDATION OF THE AFFAIRS OF THE ISSUER. THE PRINCIPAL OF THIS NOTE IS PAYABLE IN INSTALLMENTS AS SET FORTH HEREIN. ACCORDINGLY, THE OUTSTANDING PRINCIPAL AMOUNT OF THIS NOTE AT ANY TIME MAY BE LESS THAN THE AMOUNT SHOWN ON THE FACE HEREOF. ANY PERSON ACQUIRING THIS

A-2-2

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SECURITY MAY ASCERTAIN ITS CURRENT PRINCIPAL AMOUNT BY INQUIRY OF THE INDENTURE TRUSTEE.

THE RIGHT TO PAYMENT OF PRINCIPAL AND INTEREST OF THIS NOTE IS SUBJECT TO THE RIGHT OF PAYMENT OF PRINCIPAL AND INTEREST OF THE CLASS A NOTES AS MORE FULLY DESCRIBED IN THE INDENTURE REFERRED TO HEREIN.

A-2-3

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SUNRUN ATHENA ISSUER 2018-1, LLC
SOLAR ASSET BACKED NOTES, SERIES 2018-1
CLASS B NOTE

GLOBAL NOTE

Original Issue date: December 20, 2018
Rated Final Maturity: April 30, 2049
Issue Price: 99.999280%

REGISTERED OWNER: CEDE & CO.

INITIAL PRINCIPAL BALANCE: $56,500,000

CUSIP No. [86772D AB2] [U86789 AB7]

ISIN No. [US86772DAB29] [USU86789AB71]

THIS CERTIFIES THAT Sunrun Athena Issuer 2018-1, LLC, a Delaware limited liability company (hereinafter called the “Issuer”), which term includes any successor entity under the Indenture, dated as of December 20, 2018 (the “Indenture”), between the Issuer and Wells Fargo Bank, National Association, as indenture trustee (together with any successor thereto, hereinafter called the “Indenture Trustee”), for value received, hereby promises to pay to the Registered Owner named above or registered assigns, subject to the provisions hereof and of the Indenture, (A) interest based on the Interest Accrual Period at the applicable Note Rate defined in the Indenture, on each Payment Date beginning in January 2019 (or, if such day is not a Business Day, the next succeeding Business Day), and (B) principal on each Payment Date after the Outstanding Note Balance of the Class A Notes has been reduced to zero in the manner and subject to the Priority of Payments as set forth in the Indenture; provided, however, that the Notes are subject to prepayment and redemption as set forth in the Indenture. This note (this “Class B Note”) is one of a duly authorized series of Class B Notes of the Issuer designated as its Sunrun Athena Issuer 2018-1, LLC, 7.50% Solar Asset Backed Notes, Series 2018-1, Class B (the “Class B Notes”). The Indenture authorizes the issuance of $56,500,000 in Outstanding Note Balance of Class B Notes and $322,000,000 in Outstanding Note Balance of Sunrun Athena Issuer 2018-1, LLC, 5.31% Solar Asset Backed Notes, Series 2018-1, Class A (the “Class A Notes” and together with the Class B Notes, the “Notes”). The Indenture provides that the Notes will be entitled to receive payments in reduction of the Outstanding Note Balance, in the amounts, from the sources, and at the times more specifically as set forth in the Indenture. The Notes are secured by the Trust Estate (as defined in the Indenture).

Reference is hereby made to the Indenture and all indentures supplemental thereto for a statement of the respective rights thereunder of the Issuer, the Indenture Trustee and the Holders of the Notes and the terms upon which the Notes are to be authenticated and delivered. All terms used in this Note which are not defined herein shall have the meanings assigned to them in the Indenture.

THE OBLIGATION OF THE ISSUER TO REPAY THE NOTES IS A LIMITED, NONRECOUSE OBLIGATION SECURED ONLY BY THE TRUST ESTATE. All payments of principal of and interest on the Class B Notes shall be made only from the Trust Estate, and each

A-2-4

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Noteholder and Note Owner, by its acceptance of this Class B Note, agrees that it shall be entitled to payments solely from such Trust Estate pursuant to the terms of the Indenture. The actual Outstanding Note Balance on this Class B Note may be less than the principal balance indicated on the face hereof. The actual Outstanding Note Balance on this Class B Note at any time may be obtained from the Indenture Trustee.

With respect to payment of principal of and interest on the Class B Notes, the Indenture provides the following:

(a) Until fully paid, principal payments on the Class B Notes will be made on each Payment Date after the Outstanding Note Balance of the Class A Notes has been reduced to zero in an amount, at the time, and in the manner provided in the Indenture provided, however, that the Notes are subject to prepayment and redemption as set forth in the Indenture. The Outstanding Note Balance of each Class B Note shall be payable no later than the Rated Final Maturity thereof unless the Outstanding Note Balance of such Class B Note becomes due and payable at an earlier date pursuant to the Indenture, and in each case such payment shall be made in an amount and in the manner provided in the Indenture.

(b) The Class B Notes shall bear interest on the Outstanding Note Balance of the Class B Notes and accrued but unpaid interest thereon, at the applicable Note Rate. The Note Interest with respect to the Class B Notes shall be payable on each Payment Date to the extent that the Collection Account then contains sufficient amounts to pay such Note Interest pursuant to Section 5.05 of the Indenture. Note Interest will accrue on the basis of a 360-day year consisting of twelve 30-day months.

All payments of interest and principal on the Class B Notes on the applicable Payment Date shall be paid to the Person in whose name such Class B Note is registered at the close of business on the Record Date for such Payment Date in the manner provided in the Indenture. All reductions in the Outstanding Note Balance of a Class B Note (or one or more Predecessor Notes) effected by full or partial payments of installments of principal shall be binding upon all past, then current, and future Holders of such Class B Note and of any Class B Note issued upon the registration of transfer thereof or in exchange therefor or in lieu thereof, whether or not such payment is noted on such Class B Note.

The Rated Final Maturity of the Notes is the Payment Date in April 2049 unless the Notes are earlier prepaid or redeemed in whole or accelerated pursuant to the Indenture. The Indenture Trustee shall pay to each Class B Noteholder of record on the preceding Record Date either (i) by wire transfer, in immediately available funds to the account of such Class B Noteholder at a bank or other entity having appropriate facilities therefor, if such Class B Noteholder shall have provided to the Indenture Trustee appropriate written instructions at least five Business Days prior to the related Payment Date (which instructions may remain in effect for subsequent Payment Dates unless revoked by the Class B Noteholder), or (ii) if not, by check mailed to such Class B Noteholder at the address of such Class B Noteholder appearing in the Note Register, the amounts to be paid to such Class B Noteholder pursuant to such Class B Noteholder’s Notes; provided, that so long as

A-2-5

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the Class B Notes are registered in the name of the Securities Depository such payments shall be made to the nominee thereof in immediately available funds.

THE CLASS B NOTES SHALL BE SUBJECT TO VOLUNTARY PREPAYMENT AND OPTIONAL REDEMPTION AT THE OPTION OF THE ISSUER IN THE MANNER AND SUBJECT TO THE PROVISIONS OF THE INDENTURE. Whenever by the terms of the Indenture, the Indenture Trustee is required to prepay or redeem the Class B Notes, and subject to and in accordance with the terms of Article VI of the Indenture, the Indenture Trustee shall give notice of the prepayment or redemption in the manner prescribed by the Indenture.

Subject to certain restrictions contained in the Indenture, (i) the Class B Notes are issuable in the minimum denomination of $750,000 and in integral multiples of $1,000 in excess thereof (provided, that one Class B Note may be issued in an additional amount equal to any remaining portion of the Initial Outstanding Note Balance) and (ii) the Class B Notes may be exchanged for a like aggregate principal amount of Class B Notes of authorized denominations of the same maturity.

The final payment on any Definitive Note shall be made only upon presentation and surrender of the Note at the Corporate Trust Office of the Indenture Trustee.

The Class B Noteholders shall have no right to enforce the provisions of the Indenture or to institute action to enforce the covenants therein, or to take any action with respect to any Event of Default, or to institute, appear in or defend any suit or other proceedings with respect thereto, except as provided in the Indenture.

The Class B Notes may be exchanged, and their transfer may be registered, by the Noteholders in person or by their attorneys duly authorized in writing at the Corporate Trust Office of the Indenture Trustee only in the manner, subject to the limitations provided in the Indenture, and upon surrender and cancellation of the Class B Notes. Upon exchange or registration of such transfer, a new registered Class B Note or Notes evidencing the same outstanding principal amount will be executed in exchange therefor.

All amounts collected as payments on the Trust Estate or otherwise shall be applied in the order of priority specified in the Indenture.

Each Person who has or who acquires any Ownership Interest in a Class B Note shall be deemed by the acceptance or acquisition of such Ownership Interest to have agreed to be bound by the provisions of the Indenture. A Noteholder may not sell, offer for sale, assign, pledge, hypothecate or otherwise transfer or encumber all or any part of its interest in the Class B Notes except pursuant to an effective registration statement covering such transaction under the Securities Act of 1933, as amended, and effective qualification or registration under all applicable State securities laws and regulations or under an exemption from registration under said Securities Act and said State securities laws and regulations.

[Add the following for Rule 144A Global Notes:

A-2-6

[***] = Certain confidential information contained in this document, marked by brackets, is filed with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.
Interests in this Class B Note may be exchanged for an interest in the corresponding Regulation S Temporary Global Note or Regulation S Permanent Global Note, in each case subject to the restrictions specified in the Indenture.

[Add the following for Regulation S Temporary Global Notes:

Interests in this Class B Note may be exchanged for an interest in the corresponding Rule 144A Global Note, subject to the restrictions specified in the Indenture.

On or after the 40th day after the later of the Closing Date and the commencement of the offering of the Notes, interests in this Regulation S Temporary Global Note may be exchanged (free of charge) for interests in a Regulation S Permanent Global Note. The Regulation S Permanent Global Note shall be so issued and delivered in exchange for only that portion of this Regulation S Temporary Global Note in respect of which there shall have been presented to DTC by Euroclear or Clearstream a certification to the effect that it has received from or in respect of a person entitled to an interest (as shown by its records) a certification that the beneficial interests in such Regulation S Temporary Global Note are owned by persons who are not U.S. persons (as defined in Regulation S).

[Add the following for Regulation S Permanent Global Notes:

Interests in this Class B Note may be exchanged for an interest in the corresponding Rule 144A Global Note, subject to the restrictions specified in the Indenture.

In addition, each Person who has or who acquires any Ownership Interest in a Class B Note shall be deemed by the acceptance or acquisition of such Ownership Interest to have agreed to be bound by the provisions of Section 12.18 of the Indenture. Prior to the date that is one year and one day after the payment in full of all amounts payable with respect to the Class B Notes, each Person who has or acquires an Ownership Interest in a Class B Note agrees that such Person will not institute against the Issuer, or join any other Person in instituting against the Issuer, any bankruptcy, reorganization, arrangement, insolvency or liquidation proceedings or other proceedings under the laws of the United States or any State of the United States. This covenant shall survive the termination of the Indenture.

Before the due presentment for registration of transfer of this Class B Note, the Issuer, the Indenture Trustee and any agent of the Issuer or the Indenture Trustee may treat the person in whose name this Class B Note is registered (i) on any Record Date for purposes of making payments, and (ii) on any other date for any other purpose, as the owner hereof, whether or not this Class B Note be overdue, and neither the Issuer, the Indenture Trustee nor any such agent shall be affected by notice to the contrary.

The Indenture permits the amendment thereof for the purpose of adding any provisions to, or changing in any manner or eliminating any of the provisions of, the Indenture or of modifying in any manner the rights of the Noteholders under the Indenture at any time by the Issuer and the Indenture Trustee (and, in some cases, only with the consent of the Noteholder affected thereby) and compliance with certain other conditions. Any such consent by the Holder, at the time of the

A-2-7

[***] = Certain confidential information contained in this document, marked by brackets, is filed with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.
giving thereof, of this Class B Note (or any one or more Predecessor Notes) shall be conclusive and binding upon such Holder and upon all future Holders of this Class B Note and of any Class B Note issued upon the registration of transfer hereof or in exchange hereof or in lieu hereof whether or not notation of such consent or waiver is made upon this Class B Note.

The Class B Notes and all obligations with respect thereto, including obligations under the Indenture, will be limited recourse obligations of the Issuer payable solely from the Trust Estate. Neither the Issuer, the Depositor, the Transaction Manager, the Transaction Transition Manager, the Custodian, the Note Registrar, the Indenture Trustee in its individual capacity or in its capacity as Indenture Trustee, nor any of their respective Affiliates, agents, partners, beneficiaries, officers, directors, stockholders, stockholders of partners, employees or successors or assigns, shall be personally liable for any amounts payable, or performance due, under the Notes or the Indenture. Without limiting the foregoing, each Noteholder and each Note Owner of any Class B Note by its acceptance thereof, and the Indenture Trustee, shall be deemed to have agreed (i) that it shall look only to the Trust Estate to satisfy the Issuer’s obligations under or with respect to a Class B Note or the Indenture, including but not limited to liabilities under Article V of the Indenture and liabilities arising (whether at common law or equity) from breaches by the Issuer of any obligations, covenants and agreements herein or, to the extent enforceable, for any violation by the Issuer of applicable State or federal law or regulation, provided that, the Issuer shall not be relieved of liability hereunder with respect to any misrepresentation in the Indenture or any Transaction Document, or fraud, of the Issuer, and (ii) to waive any rights it may have to obtain a deficiency or other monetary judgment against either the Issuer or any of its principals, directors, officers, beneficial owners, employees or agents (whether disclosed or undisclosed) or their respective assets (other than the Trust Estate). The foregoing provisions of this paragraph shall not (i) prevent recourse to the Trust Estate or any Person (other than the Issuer) for the sums due or to become due under any security, instrument or agreement which is part of the Trust Estate, (ii) constitute a waiver, release or discharge of any indebtedness or obligation evidenced by the Class B Notes or secured by the Indenture, but the same shall continue until paid or discharged, or (iii) prevent the Indenture Trustee from exercising its rights with respect to the Grant, pursuant to the Indenture, of the Issuer’s rights under the Transaction Documents. It is further understood that the foregoing provisions of this paragraph shall not limit the right of any Person to name the Indenture Trustee in its capacity as Indenture Trustee under the Indenture or the Issuer as a party defendant in any action or suit or in the exercise of any remedy under the Notes or the Indenture, so long as no judgment in the nature of a deficiency judgment or seeking personal liability shall be asked for or (if obtained) enforced. It is expressly understood that all such liability is hereby expressly waived and released to the extent provided herein as a condition of, and as a consideration for, the execution of the Indenture and the issuance of the Notes.

The remedies of the Holder of this Class B Note as provided herein, in the Indenture or in the other Transaction Documents, shall be cumulative and concurrent and may be pursued solely against the assets of the Trust Estate. No failure on the part of the Noteholder in exercising any right or remedy hereunder shall operate as a waiver or release thereof, nor shall any single or partial exercise of any such right or remedy preclude any other further exercise thereof or the exercise of any other right or remedy hereunder.

A-2-8

[***] = Certain confidential information contained in this document, marked by brackets, is filed with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.
The Class B Notes are issuable only in registered form in denominations as provided in the Indenture and subject to certain limitations therein set forth. At the option of the Class B Noteholder, Class B Notes may be exchanged for Class B Notes of like terms, in any authorized denominations and of like aggregate principal amount, upon surrender of the Notes to be exchanged at the Corporate Trust Office of the Indenture Trustee, subject to the terms and conditions of the Indenture.

Reference is hereby made to the Indenture, a copy of which is on file with the Indenture Trustee, for the provisions, among others, with respect to (i) the nature and extent of the rights, duties and obligations of the Indenture Trustee, the Issuer and the Class B Noteholders; (ii) the terms upon which the Class B Notes are executed and delivered; (iii) the collection and disposition of payments or proceeds in respect of the Conveyed Property; (iv) a description of the Trust Estate; (v) the modification or amendment of the Indenture; (vi) other matters; and (vii) the definition of capitalized terms used in this Class B Note that are not defined herein; to all of which the Class B Noteholders and Note Owners assent by the acceptance of the Class B Notes.


REFERENCE IS HEREBY MADE TO THE PROVISIONS OF THE INDENTURE AND SUCH PROVISIONS ARE HEREBY INCORPORATED BY REFERENCE AS IF FULLY SET FORTH HEREIN.

Unless the certificate of authentication hereon has been executed by the Indenture Trustee by manual signature, this Class B Note shall not be entitled to any benefit under the Indenture or be valid or obligatory for any purpose.

A-2-9

[***] = Certain confidential information contained in this document, marked by brackets, is filed with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.
IN WITNESS WHEREOF, the Issuer has caused this instrument to be duly executed as of the date set forth below.

SUNRUN ATHENA ISSUER 2018-1, LLC, as Issuer

By: Sunrun Athena Depositor 2018-1, LLC
Its: Sole Member

By: Sunrun Athena Investor 2018-1, LLC
Its: Sole Member

By: Sunrun Athena Holdco 2018-1, LLC
Its: Sole Member

By: Sunrun Inc.
Its: Sole Member

By _________________________
Name: _________________________
Title: _________________________

A-2-10

[**] = Certain confidential information contained in this document, marked by brackets, is filed with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.
INDENTURE TRUSTEE’S CERTIFICATE OF AUTHENTICATION

This is one of the Class B Notes referred to in the within-mentioned Indenture.

Dated:

WELLS FARGO BANK NATIONAL ASSOCIATION,
asIndenture Trustee

By __
Name: __
Title: __

A-2-11

[***] = Certain confidential information contained in this document, marked by brackets, is filed with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.
[FORM OF ASSIGNMENT]

FOR VALUE RECEIVED, the undersigned hereby sells, assigns and transfers unto

(PLEASE INSERT SOCIAL SECURITY OR TAXPAYER IDENTIFICATION NUMBER OF ASSIGNEE)

____________________________________________________________________________

(Please Print or Typewrite Name and Address of Assignee)

____________________________________________________________________________

the within Note, and all rights thereunder, and hereby does irrevocably constitute and appoint

____________________________________________________________________________

Attorney to transfer the within Note on the books kept for registration thereof, with full power of substitution in the premises.

Date: ____________________

Signature Guaranteed:

NOTICE: The signature to this assignment must correspond with the name as it appears upon the face of the within Note in every particular, without alteration or enlargement or any change whatever. The signature should be guaranteed by a guarantor institution participating in the Securities Transfer Agents Medallion Program or in such other guarantee program acceptable to the Indenture Trustee.

A-2-12

[***] = Certain confidential information contained in this document, marked by brackets, is filed with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.
EXHIBIT B-1

FORM OF TRANSFER CERTIFICATE FOR EXCHANGE OR TRANSFER
FROM RULE 144A GLOBAL NOTE
TO REGULATION S GLOBAL NOTE

[DATE]

Wells Fargo Bank, National Association
600 S. 4th Street, MAC N9300-061
Minneapolis, MN 55479
Attn: Corporate Trust Services – Asset Backed Administration

Re: Sunrun Athena Issuer 2018-1, LLC

Ladies and Gentlemen:

Reference is hereby made to the Indenture, dated as of December 20, 2018 (the “Indenture”), by and among Sunrun Athena Issuer 2018-1, LLC (the “Issuer”) and Wells Fargo Bank, National Association, as indenture trustee (in such capacity, the “Indenture Trustee”). Capitalized terms used but not defined herein shall have the meanings given to them in the Indenture.

This letter relates to US $[____][____] aggregate Outstanding Note Balance of Class [A][B] Notes (the “Notes”) which in the form of the Rule 144A Global Note (CUSIP No. [_______]) in the name of [insert name of transferor] (the “Transferor”). The Transferor has requested a transfer of such beneficial interest for an interest in the Regulation S Global Note (CUSIP No. __________) to be held with [Euroclear] [Clearstream]* (Common Code No. __________) through the Securities Depository.

In connection with such request and in respect of such Notes, the Transferor does hereby certify that such transfer has been effected in accordance with the transfer restrictions set forth in the Indenture and [(i) with respect to transfers made]** pursuant to and in accordance with Regulation S under the Securities Act of 1933, as amended (the “Securities Act”), and accordingly the Transferor does hereby certify that:

(1) the offer of the Notes was not made to a person in the United States,

(2) [at the time the buy order was originated, the transferee was outside the United States or the Transferor and any person acting on its behalf reasonably believed that the transferee was outside the United States] [the transaction was executed in, on or through the facilities of a designated

B-1-1

[***] = Certain confidential information contained in this document, marked by brackets, is filed with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.
offshore securities market and neither the transferor nor any person acting on its behalf knows that the transaction was pre-arranged with a
buyer in the United States]. ***

(3) [the transferee is not a U.S. Person within the meaning of Rule 902(k) of Regulation S nor a Person acting for the account or benefit of a U.S. Person.]****

(4) no directed selling efforts have been made in contravention of the requirements of Rule 903 or Rule 904 of Regulation S, as applicable,

(5) the transaction is not part of a plan or scheme to evade the registration requirements of the Securities Act, and

(6) upon completion of the transaction, the beneficial interest being transferred as described above will be held with the Securities Depository through [Euroclear] [Clearstream]. *****

[or (ii) with respect to transfers made in reliance on Rule 144 under the Securities Act, the Transferor does hereby certify that the Notes being transferred are eligible for resale by the Transferor pursuant to Rule 144(b)(1) under the Securities Act.]******

B-1-2

[***] = Certain confidential information contained in this document, marked by brackets, is filed with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.
This certificate and the statements contained herein are made for your benefit and the benefit of the Issuer, the Indenture Trustee and the Transaction Manager.

[Insert Name of Transferor]

By: ______________________

Name: ______________________

Title: ______________________

Dated: ______________________

B-1-3

[***] = Certain confidential information contained in this document, marked by brackets, is filed with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.
[DATE]

Wells Fargo Bank, National Association
600 S. 4th Street, MAC N9300-061
Minneapolis, MN 55479
Attn: Corporate Trust Services – Asset Backed Administration

Re: Sunrun Athena Issuer 2018-1, LLC

Ladies and Gentlemen:

Reference is hereby made to the Indenture, dated as of December 20, 2018 (the “Indenture”), by and among Sunrun Athena Issuer 2018-1, LLC (the “Issuer”) and Wells Fargo Bank, National Association, as indenture trustee (in such capacity, the “Indenture Trustee”). Capitalized terms used but not defined herein shall have the meanings given to them in the Indenture.

This letter relates to US $[__][__] aggregate Outstanding Note Balance of Class [A][B] Notes (the “Notes”) which are held in the form of the Regulation S Global Note (CUSIP No. [_______]) with [Euroclear] [Clearstream]* (Common Code No. __________) through the Securities Depository in the name of [insert name of transferor] (the “Transferor”). The Transferor has requested a transfer of such beneficial interest in the Notes for an interest in the Regulation 144A Global Note (CUSIP No. __________).

In connection with such request, and in respect of such Notes, the Transferor does hereby certify that such Notes are being transferred in accordance with (i) the transfer restrictions set forth in the Indenture, and (ii) (A) Rule 144A under the Securities Act to a transferee that the Transferor reasonably believes is purchasing the Notes for its own account with respect to which the transferee exercises sole investment discretion and the transferee and any such account is a “qualified institutional buyer” (“QIB”) within the meaning of Rule 144A, in each case in a transaction meeting the requirements of Rule 144A and in accordance with any applicable securities laws of any state of the United States or any other applicable jurisdiction or (B) to a QIB pursuant to another applicable exemption from the registration requirements under the Securities Act; provided that an Opinion of Counsel confirming the applicability of the exemption claimed shall have been delivered to the Issuer and the Indenture Trustee in a form reasonably acceptable to them.

B-2-1

[***] = Certain confidential information contained in this document, marked by brackets, is filed with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.
This certificate and the statements contained herein are made for your benefit and the benefit of the Issuer, the Indenture Trustee and the Transaction Manager.

[Insert Name of Transferor]

By: __________________________
Name: _________________________
Title: __________________________
Dated: _________________________

[***] = Certain confidential information contained in this document, marked by brackets, is filed with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.
EXHIBIT B-3

FORM OF TRANSFER CERTIFICATE FOR TRANSFER
FROM DEFINITIVE NOTE
TO DEFINITIVE NOTE

[DATE]

Wells Fargo Bank, National Association
600 S. 4th Street, MAC N9300-061
Minneapolis, MN 55479
Attn: Corporate Trust Services – Asset Backed Administration

Re: Sunrun Athena Issuer 2018-1, LLC

Ladies and Gentlemen:

Reference is hereby made to the Indenture, dated as of December 20, 2018 (the “Indenture”), by and among Sunrun Athena Issuer 2018-1, LLC (the “Issuer”) and Wells Fargo Bank, National Association, as indenture trustee (in such capacity, the “Indenture Trustee”). Capitalized terms used but not defined herein shall have the meanings given to them in the Indenture.

This letter relates to US $[___][___] aggregate Outstanding Note Balance of Class [A][B] Notes (the “Notes”) which are held as Definitive Notes (CUSIP No. [_______]) in the name of [insert name of transferor] (the “Transferor”). The Transferor has requested a transfer of such beneficial interest in the Notes to [insert name of transferee] (the “Transferee”).

In connection with such request, and in respect of such Notes, the Transferor does hereby certify that such Notes are being transferred in accordance with (i) the transfer restrictions set forth in the Indenture, and (ii) Rule 144A under the Securities Act to a transferee that the Transferor reasonably believes is purchasing the Notes for its own account with respect to which the transferee exercises sole investment discretion and the transferee and any such account is a “qualified institutional buyer” (“QIB”) within the meaning of Rule 144A in a transaction meeting the requirements of Rule 144A and in accordance with any applicable securities laws of any state of the United States or any other applicable jurisdiction, or (iii) pursuant to another applicable exemption from the registration requirements under the Securities Act; provided that an Opinion of Counsel confirming the applicability of the exemption claimed shall have been delivered to the Issuer and the Indenture Trustee in a form reasonably acceptable to them.

[If transfer is pursuant to Regulation S, add the following:

The Transferor hereby certifies that:

B-3-1

[***] = Certain confidential information contained in this document, marked by brackets, is filed with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.
(1) the offer of the Notes was not made to a person in the United States,

(2) [at the time the buy order was originated, the transferee was outside the United States or the Transferor and any person acting on its behalf reasonably believed that the transferee was outside the United States] [the transaction was executed in, on or through the facilities of a designated offshore securities market and neither the transferor nor any person acting on its behalf knows that the transaction was pre-arranged with a buyer in the United States]*,

(3) the transferee is not a U.S. Person within the meaning of Rule 902(k) of Regulation S nor a Person acting for the account or benefit of a U.S. Person,

(4) no directed selling efforts have been made in contravention of the requirements of Rule 903 or Rule 904 of Regulation S, as applicable,

(5) the transaction is not part of a plan or scheme to evade the registration requirements of the Securities Act.]

[signature page follows]
This certificate and the statements contained herein are made for your benefit and the benefit of the Issuer, the Indenture Trustee and the Transaction Manager.

[Insert Name of Transferor]

By: ______________________
Name: ____________________
Title: _____________________
Dated: ____________________

B-3-3

[***] = Certain confidential information contained in this document, marked by brackets, is filed with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.
SUNRUN ATHENA ISSUER 2018-1, LLC

NOTICE OF VOLUNTARY PREPAYMENT

[DATE]
Wells Fargo Bank, National Association
600 S. 4th Street, MAC N9300-061
Minneapolis, MN 55479
Attn: Corporate Trust Services – Asset Backed Administration

Sunrun Inc.
595 Market Street
San Francisco, CA 94105
Attn: [______________]

Ladies and Gentlemen:

Pursuant to Section 6.01 of the Indenture dated as of December 20, 2018 (the "Indenture"), between Sunrun Athena Issuer 2018-1, LLC (the “Issuer”) and Wells Fargo Bank, National Association (the “Indenture Trustee”), the Indenture Trustee is hereby directed to prepay in [whole][part] the Issuer’s Solar Asset Backed Notes, Series 2018-1 on [_______ __, 20__] (the “Voluntary Prepayment Date”).

On or prior to the Voluntary Prepayment Date, the Issuer shall deposit into the Collection Account (i) the outstanding principal balance of the Notes to be prepaid, (ii) all accrued and unpaid interest thereon (including any Deferred Interest), (iii) all amounts owed to the Indenture Trustee, the Transaction Manager, the Transaction Transition Manager, the Custodian and any other parties to the Transaction Documents, and (iv) with respect to the Class A Notes, the Make Whole Amount or Call Premium, if applicable (the “Prepayment Amount”).

On the Voluntary Prepayment Date, provided that the Indenture Trustee has received the Prepayment Amount, in the case of any Voluntary Prepayment in whole, no later than 11:00 a.m. Eastern time on such Voluntary Prepayment Date, or in the case of any Voluntary Prepayment in part, no later than 12:00 p.m. Eastern time on the Business Day prior to such specified Voluntary Prepayment Date, the Indenture Trustee is directed to [(x)] withdraw the Prepayment Amount from the Collection Account and disburse such amounts in accordance with clauses (i) through (v) of the Priority of Payments and then to the Noteholders, the Make Whole Amount or Call Premium, if applicable, and then [to pay down the Notes on a pro rata basis] [first to pay down the Class A Notes until the Outstanding Note Balance of the Class A Notes has been reduced to zero, and then to pay

C-1-1

[***] = Certain confidential information contained in this document, marked by brackets, is filed with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.
down the Class B Notes until the Outstanding Note Balance of the Class B Notes has been reduced to zero] [pay down the Class B Notes] [and (y) , release any remaining assets in the Trust Estate to, or at the direction of, the Issuer].

You are hereby instructed to provide all notices of prepayment required by Section 6.03 of the Indenture. All terms used but not defined herein have the meanings assigned to such terms in the Indenture.

[signature page follows]

C-1-2

[***] = Certain confidential information contained in this document, marked by brackets, is filed with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.
IN WITNESS WHEREOF, the undersigned has executed this Notice of Voluntary Prepayment on the ___ day of __________, ____.

SUNRUN ATHENA ISSUER 2018-1, LLC, as Issuer

By __
   Name: __
   Title: __

C-1-3

[***] = Certain confidential information contained in this document, marked by brackets, is filed with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.
EXHIBIT C-2

SUNRUN ATHENA ISSUER 2018-1, LLC

NOTICE OF OPTIONAL REDEMPTION

[DATE]

Wells Fargo Bank, National Association
600 S. 4th Street, MAC N9300-061
Minneapolis, MN 55479
Attn: Corporate Trust Services – Asset Backed Administration

Sunrun Inc.
595 Market Street
San Francisco, CA 94105
Attn: [______________]

Ladies and Gentlemen:

Pursuant to Section 6.02 of the Indenture dated as of December 20, 2018 (the “Indenture”), between Sunrun Athena Issuer 2018-1, LLC (the “Issuer”) and Wells Fargo Bank, National Association (the “Indenture Trustee”), the Indenture Trustee is hereby directed to prepay in whole the Issuer’s Solar Asset Backed Notes, Series 2018-1 on [_______ __, 20__] (the “Optional Redemption Date”).

The Issuer hereby certifies that on the Optional Redemption Date, after giving effect to payments on the Optional Redemption Date, aggregate Outstanding Note Balance of the Class A Notes shall be 20% or less of the aggregate Initial Outstanding Note Balance of the Class A Notes. Prior to the Redemption Date, the Issuer shall deposit into the Collection Account, to the extent of any shortfall therein, in the following order of priority, an amount equal to the sum of (A) the Note Interest due on such Optional Redemption Date, (B) the Outstanding Note Balance, and (C) all fees, expenses and known indemnities due on such Optional Redemption Date, including the fees, expenses and known indemnities of or due to the Indenture Trustee, the Transaction Transition Manager, the Custodian and the Transaction Manager.

On the Redemption Date, the Indenture Trustee is directed to (x) make the final payment in full to the Holders of the Notes, (y) pay to the appropriate parties all fees, expenses and known indemnities then due and (z) release any remaining assets in the Trust Estate.

C-2-1

[***] = Certain confidential information contained in this document, marked by brackets, is filed with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.
You are hereby instructed to provide all notices of redemption required by Section 6.03 of the Indenture. All terms used but not defined herein have the meanings assigned to such terms in the Indenture.

C-2-2

[***] = Certain confidential information contained in this document, marked by brackets, is filed with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.
IN WITNESS WHEREOF, the undersigned has executed this Notice of Optional Redemption on the ___ day of __________, _____.

SUNRUN ATHENA ISSUER 2018-1, LLC, as Issuer

By __
   Name: __
   Title: __

C-2-3

[***] = Certain confidential information contained in this document, marked by brackets, is filed with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.
ANNEX A

STANDARD DEFINITIONS

[See attached]

ANNEX A

[***] = Certain confidential information contained in this document, marked by brackets, is filed with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.
**Standard Definitions**

**Rules of Construction.** In these Standard Definitions and with respect to the Transaction Documents (as defined below), (a) the meanings of defined terms are equally applicable to the singular and plural forms of the defined terms, (b) in any Transaction Document, the words "hereof," "herein," "hereunder" and similar words refer to such Transaction Document as a whole and not to any particular provisions of such Transaction Document, (c) any subsection, Section, Article, Annex, Schedule and Exhibit references in any Transaction Document are to such Transaction Document unless otherwise specified, (d) the term "documents" includes any and all documents, instruments, agreements, certificates, indentures, notices and other writings, however evidenced (including electronically), (e) the term "including" is not limiting and (except to the extent specifically provided otherwise) means "including (without limitation)", (f) unless otherwise specified, in the computation of periods of time from a specified date to a later specified date, the word "from" means "from and including," the words "to" and "until" each means "to but excluding," and the word "through" means "to and including", (g) the words "may" and "might" and similar terms used with respect to the taking of an action by any Person shall reflect that such action is optional and not required to be taken by such Person, (h) references to any Person shall be deemed to include its successors and permitted assigns, and (i) references to an agreement or other document include references to such agreement or document as amended, restated, reformed, supplemented and/or otherwise modified in accordance with the terms thereof.

"1940 Act" means the Investment Company Act of 1940, as amended, including the rules and regulations thereunder.

"Account Property" means the Accounts and all proceeds of the Accounts, including, without limitation, all amounts and investments held from time to time in any Account (whether in the form of deposit accounts, book-entry securities, uncertificated securities, security entitlements (as defined in Section 8-102(a)(17) of the UCC as enacted in the State of New York), financial assets (as defined in Section 8-102(a)(9) of the UCC), or any other investment property (as defined in Section 9-102(a)(49) of the UCC)).

"Accounts" means collectively, the Collection Account, the Liquidity Reserve Account, the Supplemental Reserve Account and the Tax Loss Insurance Proceeds Account.

"Acknowledgment" means, with respect to each Project Company (other than the Athena 2018 Project Company), an agreement entered into among the related Tax Equity Investor Member, the related Managing Member and the Indenture Trustee whereby such Tax Equity Investor Member
consents to (i) the transfers from the Original Managing Member Owners, (ii) the pledge by the Issuer of the membership interests of the related Managing Members and the related class B membership interests to the Indenture Trustee for the benefit of the Noteholders, (iii) the right, but not the obligation, of the Indenture Trustee, upon the direction of the requisite Noteholders pursuant to the Indenture, to exercise its rights and remedies in respect of its security interest in all or any portion of such membership interests and (iv) any direct or indirect transfer of such membership interests by the Indenture Trustee to a subsequent owner resulting from the exercise of remedies by the Indenture Trustee, in each case, without any further approval of, consent by, or other action by or of such Tax Equity Investor Member; provided that the Designated Transfer Restrictions are satisfied in respect of any transfer described in clauses (iii) and (iv) above.

"Act" has the meaning set forth in Section 12.03 of the Indenture.

"Addendum to the Master Backup Services Agreement" means an addendum to the Master Backup Services Agreement by and among a Project Company, Sunrun and the Backup Servicer pursuant to which the Backup Servicer agrees to perform certain services specified in, and such Project Company agrees to be bound by, the Master Backup Services Agreement.

"Administrative Fee" means a quarterly fee owed to the Operator pursuant to each MOMA equal to (i) in the case of the Athena 2018 Project Company and the [***] Project Company $[***], (ii) in the case of the [***] Project Company, the [***] Project Company and the [***]Project Company, $[***], and (iii) in the case of the [***] Project Company, $[***], in each case, increased annually on January 1 of every year of the term of the related MOMA by [***]%, commencing January 1, 2019.

"Administrative Services" means the billing, collection, monitoring, reporting and other administrative services (other than O&M Services) required to be performed by the Operator pursuant to the terms of each MOMA.

"Advisers Act" means the Investment Advisers Act of 1940, as amended.

"Affiliate" means, with respect to any specified Person, any other Person controlling or controlled by or under common control with such specified Person. For the purposes of this definition, a Person shall be deemed to "control" another Person if the controlling Person owns 5% or more of any class of voting securities of the controlled Person or possesses, directly or indirectly, the power to direct or cause the direction of the management or policies of the controlled Person, whether through ownership of stock, by contract or otherwise; and the terms "controlling" and "controlled" have meanings correlative to the foregoing. For the avoidance of doubt, each Tax

[***] = Certain confidential information contained in this document, marked by brackets, is filed with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.
Equity Investor Member is deemed not to be an Affiliate of the related Project Company solely as a result of owning a membership interest in such Project Company.

"Agent Member" means a member of, or participant in, the Securities Depository.

[***] = Certain confidential information contained in this document, marked by brackets, is filed with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.
"Aggregate Discounted Solar Asset Balance" means, as of any date of determination, the sum of the Discounted Solar Asset Balances of all Solar Assets as of such date of determination.

"Aggregate Outstanding Note Balance" means, as of any date of determination, an amount equal to the sum of the Outstanding Note Balances of all Classes of Notes as of such date.

"Allocated Services Provider Fee" means, for a Solar Asset, the product of (1) 1/12 and (2) the DC kW of installed nameplate capacity of the related PV System and (3) the Allocated Services Provider Fee Base Rate.

"Allocated Services Provider Fee Base Rate" means, on the Closing Date, an amount equal to $[***] and on each January Determination Date commencing in January 2020 shall be increased by [***] %.

"Ancillary Customer Agreement" means, in respect of each Covered Solar Asset, all agreements and documents ancillary to the Customer Agreement associated with such Covered Solar Asset, which are entered into with a Host Customer in connection therewith.

"Applicable Law" means all applicable laws of any Governmental Authority, including, without limitation, laws relating to consumer leasing and protection and any ordinances, judgments, decrees, injunctions, writs and orders or like actions of any Governmental Authority and rules and regulations of any federal, regional, state, county, municipal or other Governmental Authority.

"Applicable Procedures" has the meaning specified in Section 2.08(a) of the Indenture.

"Athena 2018 Project Company" means Sunrun Athena Owner 2018, LLC, a Delaware limited liability company.

"Authorized Officer" means (i) with respect to the Issuer, any officer of Sunrun, as the sole member of the sole member of the sole member of the Depositor, which is the sole member of the Issuer and who is authorized to act for Sunrun in matters relating to the Issuer and whose name appears on a list of authorized officers provided by Sunrun to the Indenture Trustee (containing the specimen signatures of such officers), as such list may be amended from time to time, and (ii) with respect to any other Person, the Chairman, Co-Chairman or Vice Chairman of the Board of Directors, the President, any Vice President, any Assistant Vice President, the Secretary, any Assistant Secretary, the Treasurer, any Assistant Treasurer or any other authorized officer of the Person who is authorized to act for the Person and whose name appears on a list of such authorized officers

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furnished by the Person to the Indenture Trustee (containing the specimen signature of such officers), as such list may be amended or supplemented from time to time.

- 5 -

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"Available Funds" means, with respect to each Payment Date, the aggregate Managing Member Distributions, together with (i) earnings on Eligible Investments, (ii) amounts deposited by the Depositor pursuant to the Depositor Contribution Agreement or the Performance Guarantor pursuant to the Performance Guaranty, (iii) amounts transferred from the Supplemental Reserve Account or the Liquidity Reserve Account, (iv) all distributions made by a Project Company to the Issuer upon the Issuer's acquisition of the related Tax Equity Investor Member's membership interest in such Project Company pursuant to the related Purchase Option or the Withdrawal Option, in each case if exercised, and (v) the Collection Account Closing Date Deposit.


"Base Rate" means an amount equal to (i) in the case of the Athena 2018 Project Company for (x) Customer Agreements (other than pre-paid Customer Agreements), $[***] and (y) pre-paid Customer Agreements, $[***], (ii) in the case of the [***] Project Company, the [***] Project Company and the [***] Project Company for (x) Customer Agreements (other than pre-paid Customer Agreements), $[***] and (y) pre-paid Customer Agreements, $[***], (iii) in the case of the [***] Project Company for (x) Customer Agreements (other than pre-paid Customer Agreements), $[***] and (y) pre-paid Customer Agreements, $[***] and (iv) in the case of the [***] Project Company for all Customer Agreements (including pre-paid Customer Agreements), $[***], in each case, increased annually on January 1 of every year of the term of the related MOMA by [***]%, commencing January 1, 2019.

"Benefit Plan Investor" has the meaning set forth in Section 2.07(c)(v) of the Indenture.

"Blocked Account Control Agreement" means each blocked account control agreement entered into by a Project Company pursuant to which such Project Company has granted to the related Tax Equity Investor Member a security interest in all rights of such Project Company with respect to certain accounts.

"Book-Entry Notes" means a beneficial interest in the Notes, ownership and transfers of which shall be made through book entries by a Securities Depository as described in Section 2.02 of the Indenture.

"[***] Project Company" means Sunrun [***] Owner [***], LLC, a Delaware limited liability company.

"Business Day" means any day other than (i) a Saturday or Sunday, or (ii) a day on which banking institutions in New York City, the city in which the principal place of business of the

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Transaction Manager is located or the city in which the Corporate Trust Office of the Indenture Trustee is located are authorized or obligated by law or executive order to be closed.

“Calculation Date” means, with respect to each Payment Date, unless the context requires otherwise, the close of business on the last day of the related Collection Period.

“Call Premium” means, with respect to a Voluntary Prepayment of the Class A Notes on or after the Call Premium Determination Date but prior to the Make Whole Determination Date,

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an amount equal to [***]% of the amount of principal of the Class A Notes being prepaid on such Voluntary Prepayment Date.

"Call Premium Determination Date" means the [***] Payment Date.

"Cancelled Solar Asset" means a Solar Asset where the related Customer Agreement is a Non-PTO Customer Agreement and the related PV System is transferred by the related Project Company to Sunrun pursuant to the applicable Project Company Documents as a result of the failure of the PV System to be placed in service by the completion deadline for such PV System (as determined pursuant to the applicable Project Company Documents).

"Certifications" means the Closing Date Certification and the Post-Closing Certification collectively.

"Class" means all of the Notes of a series having the same Rated Final Maturity, interest rate, priority of payments and designation.

"Class A Additional Principal Amount" means, with respect to any Payment Date, a mandatory prepayment of the Outstanding Note Balance of the Class A Notes in an amount equal to the product of (a) (1) if the Outstanding Note Balance of the Class B Notes is greater than zero, (i) for the period commencing on (and including) the first Payment Date and ending on (and including) the April 2024 Payment Date, [***]%, and (ii) thereafter, [***]%, and (2) if the Outstanding Note Balance of the Class B Notes has been reduced to zero, (i) for the period commencing on (and including) the first Payment Date and ending on (and including) the April 2024 Payment Date, [***]%, and (ii) thereafter, [***]%, and (b) all Available Funds remaining after payment of clauses (i) through (vii) of the Priority of Payments; provided, however, on any Payment Date following the Optional Redemption Date, the Class A Additional Principal Amount shall be [***]% of all Available Funds remaining after payment of clauses (i) through (vii) of the Priority of Payments.

"Class A Notes" means the 5.31% Solar Asset Backed Notes, Series 2018-1, Class A issued pursuant to the Indenture.

"Class B Additional Principal Amount" means, with respect to any Payment Date, a mandatory prepayment of the Outstanding Note Balance of the Class B Notes in an amount equal to the product of (a) [***]% and (b) all Available Funds remaining after payment of clauses (i) through (viii)(a) of the Priority of Payments; provided, however, on any Payment Date following the Optional Redemption Date, the Class B Additional Principal Amount shall be [***]% of all Available Funds remaining after payment of clauses (i) through (viii)(a) of the Priority of Payments.

- 8 -

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"Class B Notes" means the 7.50% Solar Asset Backed Notes, Series 2018-1, Class B issued pursuant to the Indenture.

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"Clearstream" has the meaning specified in Section 2.02(a) of the Indenture.

"Closing Date" means the date on which the conditions set forth in Section 6 of the Note Purchase Agreement are satisfied and the Notes are issued, which date shall be December 20, 2018.

"Closing Date Certification" has the meaning set forth in Section 4(a) of the Custodial Agreement.

"Closing Date Delinquent Solar Asset" means in the case of a Solar Asset, on the Closing Date, the related Host Customer is more than 120 days past due on any portion of a contractual payment due under the related Customer Agreement. For purposes of calculating the Liquidated Damages Amount, each Closing Date Delinquent Solar Asset will be deemed to have a Discounted Solar Asset Balance equal to $[***].

"Code" means the Internal Revenue Code of 1986, as amended, including any successor or amendatory statutes and U.S. Department of the Treasury regulations promulgated thereunder.

"Collection Account" has the meaning set forth in Section 5.01 of the Indenture.

"Collection Account Closing Date Deposit" means an amount equal to $[***].

"Collection Period" means, with respect to a January Payment Date, the immediately preceding three-month period beginning on and including October 1 and ending on and including December 31; with respect to an April Payment Date, the immediately preceding three-month period beginning on and including January 1 and ending on and including March 31; with respect to a July Payment date, the immediately preceding three-month period beginning on and including April 1 and ending on and including June 30 and with respect to an October Payment Date, the immediately preceding three-month period beginning on and including July 1 and ending on and including September 30; provided, however, that the initial Collection Period will be the period beginning on and including, October 1, 2018 through and including December 31, 2018.

"Consumer Protection Law" means all Applicable Laws and implementing regulations protecting the rights of consumers, including but not limited to those Applicable Laws enforced or administered by the Consumer Financial Protection Bureau, the Federal Trade Commission, and any other federal or state Governmental Authority (such as, by way of example, the California Department of Consumer Affairs) empowered with similar responsibilities.

"Contribution Agreements" means the [***] Distribution, Contribution and Sale Agreement, the [***] Distribution, Contribution and Sale Agreement, the [***] Distribution, Contribution and Sale Agreement and the Depositor Contribution Agreement.

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"Controlling Class" means the Class A Notes until the Outstanding Note Balance thereof has been reduced to zero, then the Class B Notes.

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“Conveyed Property” means the [***] Conveyed Property, the [***] Conveyed Property, the [***] Conveyed Property and the Depositor Conveyed Property.

“Corporate Trust Office” means the office of the Indenture Trustee at which its corporate trust business shall be administered, which office on the Closing Date shall be for all purposes, Wells Fargo Bank, National Association 600 S. 4th Street, MAC N9300-061, Minneapolis, MN 55479, Attention: Corporate Trust Services – Asset Backed Administration, or such other address as shall be designated by the Indenture Trustee in a written notice to the Issuer and the Transaction Manager.

“Covered Solar Asset” means, for purposes of the Transaction Management Agreement, each Solar Asset set forth on the Schedule of Solar Assets attached to the Indenture.

“Covered Tax Position” means that the basis or qualified investment for each PV System for purposes of determining the amount of ITC is at least equal to the PV System Purchase Price.

“Custodial Agreement” means that certain custodial agreement, dated as of the Closing Date, among the Custodian, the Transaction Manager, Sunrun, the Indenture Trustee and the Issuer.

“Custodian” means Wells Fargo, in its capacity as custodian of the Custodian Files pursuant to the terms of the Custodial Agreement, and its permitted successors and assigns.

“Custodian Fee” means, for each Payment Date (in accordance with and subject to the Priority of Payments) an amount as set forth in the applicable fee schedule.

“Custodian File” means the file pertaining to each Solar Asset containing, without limitation, (i) a fully executed Electronic Copy of the related Customer Agreement, including any amendments thereto (including Electronic Copies of any related Payment Facilitation Agreement), (ii) a fully executed Electronic Copy of the related PBI Documents, if any, or, for any PBI Payments not evidenced by a signed agreement, evidence of the application, reservation and procurement of such PBI Payment, (iii) a fully executed Electronic Copy of the related Interconnection Agreement to which Sunrun is a party, if any, (iv) a fully executed Electronic Copy of the related Net Metering Agreement to which Sunrun is a party, if any, (v) Electronic Copies of documents evidencing the related permission to operate the related PV System, if any, (vi) a fully executed wet ink original of the related Master Turnkey Installation Agreement or, if such Master Turnkey Installation Agreement was converted into, or was originated as, an Electronic Copy, the Electronic Copy of the related Master Turnkey Installation Agreement, including any amendments thereto, and (vii)

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Electronic Copies of any other documents reasonably required by the Issuer, from time to time to be kept on file, relating to such Solar Asset or the related Host Customer.

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"Customer Agreement" means, in respect of a PV System, a Customer Lease Agreement or a Power Purchase Agreement entered into with a Host Customer and all related Ancillary Customer Agreements, including any related Payment Facilitation Agreements.

"Customer Lease Agreement" means an agreement between the owner of the PV System and a Host Customer whereby the Host Customer leases a PV System from such owner for fixed monthly payments.

"Cut-Off Date" means September 30, 2018.

"Default" means any event which results, or which with the giving of notice or the lapse of time or both would result, in an Event of Default or a Transaction Manager Termination Event.

"Defaulted Solar Asset" means a Solar Asset for which (i) the related Host Customer is more than 120 days past due on any portion of a contractual payment due under the related Customer Agreement and (ii) the related Customer Agreement has not been brought current, the related PV System has not been removed and redeployed and/or the related Customer Agreement has not been reassigned (or a replacement Customer Agreement executed) within 240 days after the end of such 120 day period; provided that, for the avoidance of doubt, any past due amounts owed by an original Host Customer after reassignment to or execution of a replacement Customer Agreement with a new Host Customer shall not cause the Solar Asset to be deemed to be a Defaulted Solar Asset.

"Defective Solar Asset" means a Designated Solar Asset with respect to which it is determined by the Indenture Trustee (acting at the written direction of the Majority Noteholders of the Controlling Class) or the Transaction Manager, at any time, that (i) the Depositor breached the representation set forth in Section 6(b) of the Depositor Contribution Agreement with respect to such Designated Solar Asset and (ii) such breach has a material adverse effect on the Noteholders and unless such breach has been cured within the applicable grace period or waived, in writing, by the Indenture Trustee, acting at the direction of the Majority Noteholders of the Controlling Class.

"Deferred Interest" means, with respect to the Class B Notes and any Payment Date that occurs during a Sequential Interest Amortization Period, the sum of (i) interest accrued during the related Interest Accrual Period at the related Note Rate on the Outstanding Note Balance of the Class B Notes immediately prior to such Payment Date and (ii) the amount of unpaid Deferred Interest for the Class B Notes, from prior Payment Dates plus, to the extent permitted by law, interest thereon at the related Note Rate.

"Definitive Notes" has the meaning set forth in Section 2.02(c) of the Indenture.

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“Delivery” when used with respect to Account Property means:

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(i)(A) with respect to bankers’ acceptances, commercial paper, negotiable certificates of deposit and other obligations that constitute "instruments" within the meaning of Section 9-102(a)(47) of the UCC, transfer thereof:

(1) by physical delivery to the Indenture Trustee, indorsed to, or registered in the name of, the Indenture Trustee or its nominee or indorsed in blank;

(2) by the Indenture Trustee continuously maintaining possession of such instrument; and

(3) by the Indenture Trustee continuously indicating by book-entry that such instrument is credited to the related Account;

(B) with respect to a "certificated security" (as defined in Section 8-102(a)(4) of the UCC), transfer thereof:

(1) by physical delivery of such certificated security to the Indenture Trustee, provided that if the certificated security is in registered form, it shall be indorsed to, or registered in the name of, the Indenture Trustee or indorsed in blank;

(2) by the Indenture Trustee continuously maintaining possession of such certificated security; and

(3) by the Indenture Trustee continuously indicating by book-entry that such certificated security is credited to the related Account;

(C) with respect to any security issued by the U.S. Treasury, the Federal Home Loan Mortgage Corporation or the Federal National Mortgage Association that is a book-entry security held through the Federal Reserve System pursuant to Federal book entry regulations, the following procedures, all in accordance with applicable law, including applicable federal regulations and Articles 8 and 9 of the UCC, transfer thereof:

(1) by (x) book-entry registration of such property to an appropriate book-entry account maintained with a Federal Reserve Bank by a securities intermediary which is also a "depository" pursuant to applicable federal regulations and issuance by such securities intermediary of a deposit advice or other written confirmation of such book-entry registration to the Indenture Trustee of the purchase by the securities intermediary on behalf of the Indenture Trustee of such book-entry security; the making by such securities intermediary of entries in its books and records identifying such book-entry security held through the Federal Reserve System pursuant to Federal book-entry regulations as belonging to the Indenture Trustee and continuously indicating that such securities intermediary holds such book-entry security solely as agent for the Indenture Trustee or

- 16 -

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(y) continuous book-entry registration of such property to a book-entry account maintained by the Indenture Trustee with a Federal Reserve Bank; and

(2) by the Indenture Trustee continuously indicating by book-entry that property is credited to the related Account;

(D) with respect to any asset in the Accounts that is an "uncertificated security" (as defined in Section 8-102(a)(18) of the UCC) and that is not governed by clause (C) above or clause (E) below:

(1) transfer thereof:

(a) by registration to the Indenture Trustee as the registered owner thereof, on the books and records of the issuer thereof; or

(b) by another Person (not a securities intermediary) who either becomes the registered owner of the uncertificated security on behalf of the Indenture Trustee, or having become the registered owner, acknowledges that it holds for the Indenture Trustee; or

(2) the issuer thereof has agreed that it will comply with instructions originated by the Indenture Trustee with respect to such uncertificated security without further consent of the registered owner thereof; or

(E) in the case of each security in the custody of or maintained on the books of a clearing corporation (as defined in Section 8-102(a)(5) of the UCC) or its nominee, by causing:

(1) the relevant clearing corporation to credit such security to a securities account of the Indenture Trustee at such clearing corporation; and

(2) the Indenture Trustee to continuously indicate by book-entry that such security is credited to the related Account;

(F) with respect to a "security entitlement" (as defined in Section 8-102(a)(17) of the UCC) to be transferred to or for the benefit of a collateral agent and not governed by clauses (C) or (E) above: if a securities intermediary (1) indicates by book entry that the underlying "financial asset" (as defined in Section 8-102(a)(9) of the UCC) has been credited to be the Indenture Trustee's "securities account" (as defined in Section 8-501(a) of the UCC), (2) receives a financial asset from the Indenture Trustee or acquires the underlying financial asset for the Indenture Trustee, and in either case, accepts it for credit to the Indenture Trustee's securities account or (3) becomes obligated under other law, regulation or rule to credit the underlying financial asset to the Indenture Trustee's securities account, the making by the securities intermediary of entries on its books and records continuously

- 17 -

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identifying such security entitlement as belonging to the Indenture Trustee; and continuously indicating by book-entry that such securities entitlement is

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credited to the Indenture Trustee's securities account; and by the Indenture Trustee continuously indicating by book-entry that such security entitlement (or all rights and property of the Indenture Trustee representing such securities entitlement) is credited to the related Account; and/or

(ii) In the case of any such asset, such additional or alternative procedures as are now or may hereafter become appropriate to effect the complete transfer of ownership of, or control over, any such assets in the Accounts to the Indenture Trustee free and clear of any adverse claims, consistent with changes in applicable law or regulations or the interpretation thereof.

In each case of Delivery contemplated by the Indenture, the Indenture Trustee shall make appropriate notations on its records, and shall cause the same to be made on the records of its nominees, indicating that securities are held in trust pursuant to and as provided in the Indenture.

"[***] Project Company" means Sunrun [***] Owner [***], LLC, a Delaware limited liability company.

"Depositor" means Sunrun Athena Depositor 2018-1, LLC, a Delaware limited liability company.

"Depositor Contribution Agreement" means the sale and contribution agreement, dated as of the Closing Date, by and between the Depositor and the Issuer.

"Depositor Conveyed Property" has the meaning set forth in Section 2(a) of the Depositor Contribution Agreement.

"Depositor Financing Statement" means, with respect to the Depositor, the UCC-1 financing statement naming the Indenture Trustee as the secured party, the Depositor as the debtor and the Issuer as the intermediate assignor.

"Designated Solar Asset" means, as of the Closing Date, the Solar Assets (other than the Non-Advanced Solar Assets or Solar Assets related to a pre-paid Customer Agreement).

"Designated Transfer Restrictions" shall, for each Project Company, have the meaning set forth in the related Acknowledgment; provided, however, that in any applicable context, the Indenture Trustee shall not be required to make any determination as to whether any Designated Transfer Restrictions shall have been satisfied.

"Determination Date" means, with respect to each Payment Date, the close of business of the 5th Business Day prior to such Payment Date, beginning in January 2019.

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“Discount Rate” means 6.00%.

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“Discounted Solar Asset Balance” means, with respect to any Solar Asset and as of any Calculation Date, an amount equal to the present value of the remaining and unpaid stream of Net Scheduled Payments for such Solar Asset on or after such Calculation Date, based upon discounting such Net Scheduled Payments to such Calculation Date at an annual rate equal to the Discount Rate; provided, however, that any Non-Advanced Solar Asset, Defective Solar Asset, Defaulted Solar Asset, Cancelled Solar Asset or Terminated Solar Asset will be deemed to have a Discounted Solar Asset Balance equal to $[***].

“Distributable Cash” means all amounts distributable by a Project Company to its members in accordance with the applicable Project Company LLCA.

“Distribution Date” means, for each Project Company, the fifteenth (15th) day after the last day of any calendar quarter or, if such date is not a Business Day, the immediately preceding Business Day.

“DOL Final Fiduciary Rule” means 29 C.F.R. 2510.3-21, as promulgated on April 8, 2016 and as subsequently amended.

“Dollars”, "$", "U.S. Dollars" or "U.S. $" shall mean (a) United States dollars or (b) denominated in United States dollars.

“DSCR” means for any Determination Date an amount equal to:

(i) the sum of (1) the aggregate Host Customer Payments received during the related Collection Period (excluding the portion of any amounts paid by the related Host Customer that represent the prepayment or buyout of cash flows expected to be received during subsequent Collection Periods and any amounts paid by the related Host Customer in respect of sales, use or property taxes) (2) the aggregate PBI Payments received during the related Collection Period, and (3) the portion of Insurance Proceeds received during the related Collection Period related to business interruption insurance in respect of lost Host Customer Payments, minus (b) the sum of (1) the aggregate Project Company Expenses paid or reserved for during the related Collection Period with respect to all Project Companies, (2) the Tax Equity Investor Distributions in respect of the related Collection Period, (3) the aggregate indemnity payments, if any, paid or reserved for by the Managing Members to the Tax Equity Investor Members (without duplication of any amounts distributed to the Tax Equity Investor Members as a result of the occurrence of a Limited Step-up Event) in respect of the related Collection Period (other than to the extent paid from proceeds of the

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Tax Loss Insurance Policies), and (4) the sum of the Transaction Manager Fee, the Transaction Transition Manager Fee, the Custodian Fee and the Indenture Trustee Fee, in each case payable on the related Payment Date, \textit{divided by}

\begin{itemize}
\item[(ii)] the Total Debt Service for the related Payment Date.
\end{itemize}
"DTC" means The Depository Trust Company, a New York corporation and its successors and assigns.

"Early Amortization Period" means the period commencing on any Determination Date if (in each case, except during the continuance of a Sequential Interest Amortization Period):

(i) on or prior to the October 2023 Payment Date, the Solar Asset Payment Ratio for a Determination Date is less than [***]%;

(ii) after the October 2023 Payment Date, the DSCR is less than or equal to 1.15 for such Determination Date and the immediately preceding two Determination Dates; or

(iii) the insurance required to be maintained by any Project Company under the related Project Company LLCA is not in effect.

An Early Amortization Period of the type described in clause (i) shall continue until the earlier of (a) the Solar Asset Payment Ratio being equal to or greater than [***]% on a Determination Date, and (b) the Payment Date occurring in January 2024. An Early Amortization Period of the type described in clause (ii) shall continue until the DSCR is greater than 1.15 for three consecutive Determination Dates. An Early Amortization Period of the type described in clause (iii) shall continue until all insurance required to be maintained by any Project Company under the Project Company LLCA is in effect.

"ECCA" means that certain Equity Capital Contribution Agreement, dated as of September 4, 2015, by and among Sunrun Inc., [***] Lessor Project Company and [***] Managing Member.

"[***] Project Company" means Sunrun [***] Owner [***], LLC, a Delaware limited liability company.

"Electronic Copy" means the electronic form into which Sunrun, in the ordinary course of its business and in compliance with its document storage policy, originates in an electronic form or converts into an electronic form all Customer Agreements, Payment Facilitation Agreements, PBI Documents, Interconnection Agreements, Net Metering Agreements, documents evidencing the related permission to operate the related PV System, Master Turnkey Installation Agreements and any other documents reasonably required by the Issuer, from time to time to be kept on file, relating to such Solar Asset or the related Host Customer.

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"Eligible Account" means either (i) a segregated account or accounts maintained with an institution whose deposits are insured by the Federal Deposit Insurance Corporation, the unsecured and uncollateralized long-term debt obligations of which institution shall be rated at least investment grade and the short-term debt obligations of which are in the highest short term rating.

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category by the Rating Agency, and which is (A) a federal savings and loan association duly organized, validly existing and in good standing under the federal banking laws, (B) an institution duly organized, validly existing and in good standing under the applicable banking laws of any State, (C) a national banking association duly organized, validly existing and in good standing under the federal banking laws or (D) a subsidiary of a bank holding company, and as to which the Rating Agency has indicated that the use of such account shall not cause the withdrawal of its rating on any Notes, or (ii) a segregated trust account or accounts maintained with the trust department of a federal or State chartered depository institution, having capital and surplus of not less than $[***], acting in its fiduciary capacity, and acceptable to the Rating Agency.

"Eligible Benefit Plan Investor" means, with respect to a Benefit Plan Investor, a Benefit Plan Investor the fiduciary of which meets the following requirements: (i) such fiduciary is independent of the ERISA Transaction Parties; (ii) such fiduciary is (a) a bank as defined in Section 202 of the Advisers Act or similar institution that is regulated and supervised and subject to periodic examination by a state or federal agency, (b) an insurance carrier that is qualified under the laws of more than one state to perform the services of managing, acquiring or disposing of assets of a plan, (c) an investment adviser registered under the Advisers Act or, if not registered as an investment adviser under the Advisers Act by reason of paragraph (1) of Section 203A of such Act, is registered as an investment adviser under the laws of the state (referred to in such paragraph (1)) in which it maintains its principal office and place of business, (d) a broker-dealer registered under the Exchange Act, or (e) an independent fiduciary that holds and will hold, or has and will have under management or control, total assets of at least $50,000,000 at all times that the Eligible Benefit Plan Investor is invested in the Notes (excluding the owner or relative of the owner of an investing IRA or the participant or beneficiary under an investing plan investing in the Notes in such capacity); (iii) such fiduciary is capable of evaluating investment risks independently, both in general and with regard to particular transactions and investment strategies, including the acquisition, holding or continued holding, disposal, or exchange by the Eligible Benefit Plan Investor of the Notes; (iv) such fiduciary acknowledges that it has been informed by Issuer (a) that none of the ERISA Transaction Parties has undertaken or is undertaking to provide impartial investment advice, or to give advice in a fiduciary capacity, and has not given investment advice or otherwise made a recommendation, in connection with the Eligible Benefit Plan Investor's acquisition, holding or continued holding, disposal, or exchange of Notes, and (b) of the existence and nature of the financial interests of the ERISA Transaction Parties in the Eligible Benefit Plan Investor's acquisition, holding or continued holding, disposal, or exchange of any Notes; (v) such fiduciary is a "fiduciary" under ERISA or Section 4975 of the Code, or both, with respect to the acquisition, holding, continued holding, disposal, or exchange of any Notes, and is responsible for exercising independent judgment in evaluating the Eligible Benefit Plan Investor's acquisition, holding, continued holding, disposition, or exchange of any Notes; (vi) none of the ERISA Transaction Parties receives a fee or other compensation from the Eligible Benefit Plan Investor, the fiduciary or any other Eligible Benefit

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Plan Investor fiduciary, or any Eligible Benefit Plan Investor participant, or beneficiary for the provision of investment advice (rather than other services) to the Eligible Benefit Plan Investor, the fiduciary, any other Eligible Benefit Plan Investor fiduciary, any Eligible Benefit Plan Investor participant or beneficiary, or any of their respective agents or employees (which advice is expressly not being provided) in connection with the acquisition, holding, continued holding, disposition, or exchange by the Eligible Benefit Plan Investor of any Notes; and (vii) none of the ERISA Transaction Parties has exercised any authority to cause the Eligible ERISA Plan Investor to invest in the Notes or to negotiate the terms of the Eligible Benefit Plan Investor's investment in the Notes.

“Eligible Investments” means any one or more of the following obligations or securities:

(i) (a) direct interest-bearing obligations of, and interest-bearing obligations guaranteed as to payment of principal and interest by, the U.S. or any agency or instrumentality of the U.S. the obligations of which are backed by the full faith and credit of the U.S.; (b) direct interest-bearing obligations of, and interest-bearing obligations guaranteed as to payment of principal and interest by, the Federal National Mortgage Association or the Federal Home Loan Mortgage Corporation, but only if, at the time of investment, such obligations are assigned the highest credit rating by S&P; and (c) evidence of ownership of a proportionate interest in specified obligations described in (a) and/or (b) above;

(ii) demand, time deposits, money market deposit accounts, certificates of deposit of, and federal funds sold by, depository institutions or trust companies (including the Indenture Trustee acting in its commercial capacity) incorporated under the laws of the U.S. or any state thereof (or domestic branches of foreign banks), subject to supervision and examination by Federal or state banking or depository institution authorities, and having, at the time of the Issuer's investment or contractual commitment to invest therein, a short term unsecured debt rating of "A-1" by S&P (or the equivalent by the Rating Agency), or such lower rating as will not result in the downgrading, qualification or withdrawal of the rating on any Note by the Rating Agency;

(iii) securities bearing interest or sold at a discount issued by any corporation incorporated under the laws of the U.S. or any state thereof which have a rating of no less than "A-1+" by S&P and a maturity of no more than 365 days;

(iv) commercial paper (including both non-interest bearing discount obligations and interest-bearing obligations payable on demand or on a specified date not more than one year after the closing date thereof) of any corporation (other than the Issuer, but including the Indenture Trustee, acting in its commercial capacity), incorporated

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under the laws of the U.S. or any state thereof, that, at the time of the investment or contractual commitment to invest therein, a
rating of "A-1" by S&P (or the equivalent by the Rating Agency), or such lower rating as will not result in the downgrading,
qualification or withdrawal of the rating on any Note by the Rating Agency;

(v) money market mutual funds, including, without limitation, those of the Indenture Trustee or any affiliate thereof, or any other
mutual funds registered under the 1940 Act which invest only in other Eligible Investments, having a rating, at the time of such
investment, in the highest rating category by S&P (or the equivalent by the Rating Agency), including any fund for which Wells
Fargo, the Indenture Trustee or an affiliate thereof serves as an investment advisor, administrator, shareholder servicing agent,
and/or custodian or subcustodian, notwithstanding that (a) Wells Fargo, or an affiliate thereof, charges and collects fees and
expenses from such funds for services rendered, (b) Wells Fargo, the Indenture Trustee or an affiliate thereof, charges and
collects fees and expenses for services rendered under the Transaction Documents and (c) services performed for such funds and
pursuant to the Transaction Documents may converge at any time;

(vi) money market deposit accounts, demand deposits, time deposits or certificates of deposit of any depository institution or trust
company incorporated under the laws of the U.S. or any state thereof and subject to supervision and examination by federal or
state banking or depository institution authorities; provided, however, that at the time of the investment or contractual
commitment to invest therein, the commercial paper or other short-term unsecured debt obligations (other than such obligations
the rating of which is based on the credit of a Person other than such depository institution or trust company) thereof shall be
rated "A-1+" by S&P (or the equivalent by the Rating Agency); or

(vii) any investment approved in writing by the Issuer, and with respect to which the Issuer provides written evidence that such
investment will not result in a downgrading, qualification or withdrawal of the rating on any Note by the Rating Agency.

With respect to clause (v) immediately above, Wells Fargo, or an Affiliate thereof may charge and collect such fees from such funds as are
collected customarily for services rendered to such funds (but not to exceed investments earnings thereon).

The Indenture Trustee may purchase from or sell to itself or an Affiliate, as principal or agent, the Eligible Investments listed above. All
Eligible Investments in an Account shall be made in the name of the Indenture Trustee for the benefit of the Noteholders.

- 27 -

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Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.
"Eligible Letter of Credit Bank" means a financial institution having total assets in excess of $[***] and with a long term rating of at least "[***]" by S&P and a short term rating of at least "[***]" by S&P.

"Eligible Solar Asset" means a Solar Asset meeting, as of the Cut-Off Date (or as of the Closing Date where so provided), all of the requirements specified in Schedule I of the Depositor Contribution Agreement.

"Environmental Attributes" means proceeds received by the Partnership Flip Project Company for any credits (for clarity, excluding tax credits), credit certificates, green tags or similar environmental or green energy attributes generated by or associated with any Solar Asset or electricity produced therefrom.

"ERISA" has the meaning set forth in Section 2.07(c)(v) of the Indenture.

"ERISA Affiliate" means each Person (as defined in Section 3(9) of ERISA), which together with the Issuer, would be deemed to be a "single employer" within the meaning of Section 414(b), (c), (m) or (o) of the Code or Section 4001(a)(14) or 4001(b)(1) of ERISA.

"ERISA Event" means (i) that a Reportable Event has occurred with respect to any Single-Employer Plan; (ii) the institution of any steps by the Issuer or any ERISA Affiliate, the Pension Benefit Guaranty Corporation or any other Person to terminate any Single-Employer Plan or the occurrence of any event or condition described in Section 4042 of ERISA that constitutes grounds for the termination of, or the appointment of a trustee to administer, a Single-Employer Plan; (iii) the institution of any steps by the Issuer or any ERISA Affiliate to withdraw from any Multi-Employer Plan or Multiple Employer Plan or written notification of the Issuer or any ERISA Affiliate concerning the imposition of withdrawal liability; (iv) a non-exempt "prohibited transaction" within the meaning of Section 406 of ERISA or Section 4975 of the Code in connection with any Plan; (v) the cessation of operations at a facility of the Issuer or any ERISA Affiliate in the circumstances described in Section 4062(e) of ERISA; (vi) with respect to a Single-Employer Plan, a failure to satisfy the minimum funding standard under Section 412 of the Code or Section 302 of ERISA, whether or not waived; (vii) the conditions for imposition of a lien under Section 303(k) of ERISA shall have been met with respect to a Single-Employer Plan; (viii) a determination that a Single-Employer Plan is or is expected to be in "at-risk" status (within the meaning of Section 430(i)(4) of the Code or Section 303(i)(4) of ERISA); (ix) the insolvency of or commencement of reorganization proceedings with respect to a Multi-Employer Plan or written notification that a Multi-Employer Plan is in "endangered" or "critical" status (within the meaning of Section 432 of the Internal Revenue Code or Section 305 of ERISA); or (x) the taking of any action by, or the

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threatening of the taking of any action by, the Internal Revenue Service, the Department of Labor or the Pension Benefit Guaranty Corporation with respect to any of the foregoing.

"ERISA Transaction Parties" means each of the Issuer, the Sponsor, the Originator, the Transaction Manager, the Initial Purchasers or any of their respective partners, shareholders, directors, officers, employees, representatives or affiliates, the Indenture Trustee, the Transaction Transition Manager or the Custodian.


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“Euroclear” has the meaning specified in Section 2.02(a) of the Indenture.

“Event of Default” has the meaning set forth in Section 9.01 of the Indenture.

“Event of Loss” means a loss that is deemed to have occurred with respect to a PV System if such PV System is damaged or destroyed by fire, theft or other casualty and such PV System has become inoperable because of such event.

“Excess Tax Loss Insurance Policies” means the insurance policies whereby, subject to the terms thereof, the related Excess Tax Loss Policy Insurers agree to pay the Sponsor or the applicable loss payee for Losses.


“FATCA” means Sections 1471 through 1474 of the Code and any regulations or agreements thereunder or official interpretations thereof or any intergovernmental agreement between the United States and another jurisdiction entered into in connection with the implementation thereof (or any law implementing such an intergovernmental agreement).

“FATCA Withholding Tax” means any withholding or deduction pursuant to FATCA.

“Financing Statements” means, collectively, the Sunrun Financing Statement, the Sunrun Athena Holdco Financing Statement, the Sunrun Athena Investor Financing Statement, the Depositor Financing Statement and the Issuer Financing Statement.

“Flip Date” means, with respect to a Project Company (other than Athena 2018 Project Company) is the date on which the proportion of Distributable Cash distributed to the related Tax

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Equity Investor Member is reduced in accordance with the terms of the related Project Company LLCA.

"Force Majeure Event" means any event or circumstances beyond the reasonable control of and without the fault or negligence of the Person claiming Force Majeure. It shall include, without limitation, failure or interruption of the production, delivery or acceptance of electricity due to: an act of god; war (declared or undeclared); sabotage; riot; insurrection; civil unrest or disturbance; military or guerilla action; terrorism; economic sanction or embargo; civil strike, work stoppage, slow-down, or lock-out; explosion; fire; earthquake; abnormal weather condition or actions of the elements; hurricane; flood; lightning; wind; drought; the binding order of any Governmental Authority (provided that such order has been resisted in good faith by all reasonable legal means); the failure to act on the part of any Governmental Authority (provided that such action has been timely requested and diligently pursued); unavailability of electricity from the utility grid, equipment, supplies or products (but not to the extent that any such availability of any of the foregoing results from the failure of the Person claiming Force Majeure to have exercised reasonable diligence); and failure of equipment not utilized by or under the control of the Person claiming Force Majeure.

"GAAP" means (i) generally accepted accounting principles in the United States of America as in effect from time to time, consistently applied and (ii) upon mutual agreement of the parties, internationally recognized generally accepted accounting principles, consistently applied.

"Global Notes" means individually and collectively, the Temporary Regulation S Global Notes, the Permanent Regulation S Global Notes and the Rule 144A Global Notes, in the form of the Notes attached as Exhibit A-1 and Exhibit A-2 to the Indenture, that are deposited with the Indenture Trustee, as custodian for the Securities Depository, and registered in the name of the Securities Depository or its nominee.

"Governmental Authority" means any national, State or local government (whether domestic or foreign), any political subdivision thereof or any other governmental, quasi-governmental, judicial, public or statutory instrumentality, authority, body, agency, bureau or entity, (including any zoning authority, the Federal Regulatory Energy Commission, the relevant State commissions, the Federal Deposit Insurance Corporation, the Comptroller of the Currency or the Federal Reserve Board, any central bank or any comparable authority) or any arbitrator with authority to bind a party at law.

"Grant" means to pledge, create and grant a security interest in and with regard to property. A Grant shall include all rights, powers and options (but none of the obligations) of the granting party thereunder, including without limitation the immediate and continuing right to claim for,
collect, receive and give receipts for principal and interest payments in respect of such collateral and all other moneys payable thereunder, to
give and receive notices and other communications, to make waivers or other agreements, to exercise all rights and options, to bring
proceedings in the name of the granting party or otherwise, and generally to do and receive anything which the granting party is or may be
entitled to do or receive thereunder or with respect thereto.

"[***] Conveyed Property" means the property distributed, contributed and sold under the [***] Distribution, Contribution and Sale
Agreement.

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Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.
"[***] Distribution, Contribution and Sale Agreement" means the distribution, contribution and sale agreement, dated as of the Closing Date, by and among, Sunrun, Sunrun [***] Holdco [***], LLC, Sunrun [***] Portfolio [***], LLC, Sunrun [***] Portfolio [***], LLC, Sunrun Athena Holdco, Sunrun Athena Investor and the Depositor.

"Highest Lawful Rate" has the meaning set forth in each Contribution Agreement.

"Holder" means a Noteholder.

"Host Customer" means a customer under a Customer Agreement.

"Host Customer Payments" means, with respect to PV System and a Customer Agreement, all payments due under or in respect of such Customer Agreement, including any amounts attributable to sales, use or property tax.

"Indenture" means the indenture between the Issuer and the Indenture Trustee, dated as of the Closing Date.

"Indenture Trustee" means Wells Fargo, until a successor Person shall have become the Indenture Trustee pursuant to the applicable provisions of the Indenture, and thereafter "Indenture Trustee" means such successor Person in its capacity as indenture trustee.

"Indenture Trustee Fee" means, for each Payment Date (in accordance with and subject to the Priority of Payments) an amount equal to $[***].

"Independent Manager" has the meaning set forth in the Issuer Operating Agreement.

"Independent Accountant" means a nationally recognized firm of public accountants selected by the Transaction Manager; provided, that such firm is independent with respect to the Transaction Manager within the meaning of the Securities Act.

"Independent Service Provider" means (i) any Independent Accountant or (ii) any independent (within the meaning the Securities Act) third-party provider of accounting, financial analysis and reporting services that is not an Independent Accountant but that, in the reasonable judgment of the Transaction Manager, is qualified to prepare the relevant portions of the Independent Service Provider's Report.

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"Independent Service Provider's Report" has the meaning set forth in Section 4.3 of the Transaction Management Agreement.

"Initial Determination Date" means January 23, 2019.

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"Initial Outstanding Note Balance" means, with respect to the Class A Notes and the Class B Notes, $322,000,000 and $56,500,000, respectively.

"Initial Purchasers" means collectively, Credit Suisse Securities (USA) LLC, Deutsche Bank Securities Inc., KeyBanc Capital Markets Inc., Citigroup Global Markets, Inc. and SunTrust Robinson Humphrey, Inc. and their respective successors and assigns.

"Insurance Policy" means, with respect to any PV System, any insurance policy benefiting the Transaction Manager or the owner of the PV System and providing coverage for loss or physical damage, credit life, credit disability, theft, mechanical breakdown, gap or similar coverage with respect to the PV System or the Host Customer.

"Insurance Proceeds" means any funds, moneys or other net proceeds received by or on behalf of a Project Company as the payee in connection with the physical loss or damage to a PV System owned by such Project Company, including lost revenues through business interruption insurance, or any other incident that will be covered by the insurance coverage paid for and maintained by the Project Company or by the related Operator on behalf of the Project Company.

"Institutional Accredited Investor" means an accredited investor (within the meaning of Rule 501(a)(1), (2), (3) or (7) of the Securities Act).

"Interconnection Agreement" means, with respect to a PV System, a contractual or other obligation between a utility and a Host Customer (and, in some cases, the owner of the related PV System) that allows the Host Customer to interconnect such PV System to the utility electrical grid.

"Interest Accrual Period" means for each Payment Date, the period from and including the immediately preceding Payment Date to but excluding such Payment Date and in each case will be deemed to be a period of 90 days, except that the Interest Accrual Period for the initial Payment Date shall be the number of days (assuming twelve 30-day calendar months) from and including the Closing Date to, but excluding, the initial Payment Date. For purposes of this calculation, all Payment Dates will be deemed to be the 30th calendar day of the applicable month.

"Issuer" means Sunrun Athena Issuer 2018-1, LLC, a Delaware limited liability company.

"Issuer Financing Statement" means a UCC-1 financing statement naming the Indenture Trustee as the secured party and the Issuer as the debtor.

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“Issuer Operating Agreement” means that certain Amended and Restated Limited Liability Company Agreement of the Issuer dated as of the Closing Date.

“Issuer Order” means a written order or request signed in the name of the Issuer by an Authorized Officer and delivered to the Indenture Trustee.

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"Issuer Secured Obligations" means all amounts and obligations which the Issuer may at any time owe to or on behalf of the Indenture Trustee for the benefit of the Noteholders under the Indenture or the Notes.

"ITC" has the meaning ascribed to the term "ITC" or "Tax Credits" in the applicable Project Company Documents.

"ITC Loss Indemnity" means an indemnity from the Sponsor and/or the related Managing Member in favor of the Tax Equity Investor Member for the loss of ITCs to the extent such loss results from certain events specified in the applicable Project Company Documents.

"Investor Withdrawal Amount" means, upon exercise of the Withdrawal Option, an amount to which the Tax Equity Investor Member of [***] Tenant Project Company is entitled, equal to the sum of (x) the fair market value of its membership interests in [***] Tenant Project Company as of the date that the Tax Equity Investor Member provides notice that it is exercising its right to withdraw, as determined by an appraisal procedure and (y) any unpaid but accrued priority return.

"[***] Project Company" means Sunrun [***] Owner [***], LLC, a Delaware limited liability company.

"[***] Tax Loss Insurance Policy" means the insurance policy whereby, subject to certain exceptions, the [***] Tax Loss Policy Insurers agree to indemnify [***] Project Company for additional income taxes, penalties and/or interest (and related gross-up) as a result of the invalidity or disallowance of the Insured Tax Treatment as determined by a final non-appealable judgment or settlement with the Internal Revenue Service, up to a maximum of $[***], so long as the claim is reported to the insurers during the policy term.


"Insured Tax Treatment" means the ITC eligible basis of each PV System purchased by [***] Project Company on the applicable purchase date is equal to at least the applicable PV System Purchase Price.

"KBRA" means Kroll Bond Rating Agency, Inc.

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"Letter Agreement" means a letter agreement between Sunrun and the applicable Tax Equity Investor Member related to Tax Law Change True-Up Contributions to be made by Sunrun to the applicable Managing Member.

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"Letter of Credit" means any letter of credit issued by an Eligible Letter of Credit Bank and provided by the Issuer to the Indenture Trustee in lieu of or in substitution for moneys otherwise required to be deposited in the Liquidity Reserve Account or the Supplemental Reserve Account, as applicable, which Letter of Credit is to be as held an asset of the Liquidity Reserve Account or the Supplemental Reserve Account, as applicable.

"Lien" means, with respect to any asset, any mortgage, deed of trust, lien, pledge, charge, security interest, easement or encumbrance of any kind in respect of such asset, whether or not filed, recorded or otherwise perfected or effective under applicable law.

"Limited Guarantor" means Sunrun, as guarantor under the relevant Limited Guaranty.

"Limited Guaranty" means the guaranty issued by the Limited Guarantor to the applicable Partnership Flip Project Company and the applicable Tax Equity Investor Member, and, with respect to the Inverted Lease Partnership Tax Equity Transaction, the guaranty issued by the Limited Guarantor for the benefit of the Tax Equity Investor Member and [***] [***] Project Company, pursuant to which the Limited Guarantor unconditionally and irrevocably guarantees: (i) with respect to the Partnership Flip Project Company Limited Guaranties, (a) the capital contributions obligations of the Managing Member and (b) the indemnity obligations of the Managing Member, in each case pursuant to the relevant Project Company LLCA; and (ii) with respect to the Inverted Lease Partnership Tax Equity Transaction Limited Guaranty, due payment, performance and fulfillment of any and all of [***] Managing Member's and Sponsor's respective obligations under the [***] Lessor Project Company LLCA, the [***] Tenant Project Company LLCA, and the ECCA.

"Limited Step-up Event" means events set forth in a Project Company LLCA that adjust the amount or ratio of the related Tax Equity Investor Member will receive of the Distributable Cash that otherwise would be payable to the related Managing Member.

"Liquidated Damages Amount" means, as of any date of determination, for a Defective Solar Asset an amount equal to the Securitization Share of DSAB of such Solar Asset immediately prior to becoming a Defective Solar Asset.

"Liquidity Reserve Account" has the meaning set forth in Section 5.01(a) of the Indenture.

"Liquidity Reserve Account Required Balance" means with respect to the Closing Date and each Payment Date, an amount equal to the product of (i) one-half, (ii) the Note Rate with respect to the Class A Notes and (iii) the Outstanding Note Balance of the Class A Notes (before giving effect to principal payments on such Payment Date); provided, however, that with respect to the

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Closing Date, the Liquidity Reserve Account Required Balance will be calculated using the Initial Outstanding Note Balance of the Class A Notes.

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"Loss" means claims made during the policy period for additional income taxes, penalties and/or interest (and related gross-up) as a result of the inaccuracy, invalidity, inapplicability, revocation, denial, or disallowance, in whole or in part, of the Covered Tax Position with respect to the Project Companies (other than the Athena 2018 Project Company, the [***] Project Company, and the [***] Project Companies).

"Majority Noteholders" means Noteholders representing not less than 51% of the Outstanding Note Balance of, as the context shall require, a Class of Notes or all Class of Notes then Outstanding.

"Make Whole Amount" means, with respect to the Voluntary Prepayment of the Class A Notes prior to the Call Premium Determination Date, an amount (not less than zero) equal to: (a) using the Reinvestment Yield, the sum of the discounted present values of the scheduled payments of principal and interest until the Make Whole Determination Date (assuming prepayment of remaining principal of the Class A Notes on the Make Whole Determination Date) for the portion of the Class A Notes being prepaid (calculated prior to the application of the Voluntary Prepayment and assuming no Sequential Interest Amortization Period is in effect), minus (b) the amount of principal prepaid by the Voluntary Prepayment made on the Class A Notes.

"Make Whole Determination Date" means the January 2026 Payment Date.

"Manager Transition Agreement" means that certain manager transition agreement, dated as of the Closing Date, between the Transaction Manager, the Transaction Transition Manager, the Issuer and the Indenture Trustee.

"Managing Member" means, with respect to each Project Company, an indirect wholly-owned subsidiary of the Sponsor that acts as the manager of such Project Company and, as of the Closing Date, acts as the managing member of such Project Company, consisting of: (i) with respect to [***] Project Company, Sunrun [***] Manager [***], LLC, a Delaware limited liability company; (ii) with respect to [***] Project Company, Sunrun [***] Manager [***] LLC, a Delaware limited liability company; (iii) with respect to [***] Project Company, Sunrun [***] Manager [***], LLC, a Delaware limited liability company; (iv) with respect to [***] Project Company, Sunrun [***] Manager [***], LLC, a Delaware limited liability company; (v) with respect to each [***] Project Company, Sunrun [***] Manager [***], LLC, a Delaware limited liability company; and (vi) with respect to Athena 2018 Project Company, Sunrun Athena Manager 2018, LLC, a Delaware limited liability company.

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"Managing Member Distributions" means all distributions to be made by a Project Company to the related Managing Member. Managing Member Distributions in respect of any Collection Period that are collected or distributed after a Collection Period but prior to the Determination Date related to the Payment Date for such Collection Period shall be deemed to be received or distributed during such Collection Period.

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"Managing Member LLCA" means the limited liability company operating agreement of each Managing Member.

"Managing Member Membership Interest" means all right, title and interest of the member (as defined in the limited liability company agreement of a Managing Member) in the related Managing Member, including, without limitation, (i) the right to manage the business and affairs of such Managing Member, to vote on, consent to or approve matters requiring the vote, consent or approval of the members of such Managing Member and the right to dissolve such Managing Member, (ii) the right to distributions from such Managing Member and the right to allocations of profits or losses, the "limited liability company interest" (as defined in Section 18-101(8) of the Delaware Limited Liability Company Act), and (iii) status as a "member" (as defined in Section 18-101(11) of the Delaware Limited Liability Company Act) of such Managing Member.

"Managing Member Pledge Agreement" means the pledge and security agreement entered into by each Managing Member on the Closing Date and delivered to the Indenture Trustee pledging such Managing Member's membership in the related Project Company to the Indenture Trustee for the benefit of the Noteholders.

"Master Backup Services Agreement" means that certain master backup services agreement by and among the Operator, the Master Backup Servicer and each Project Company or Managing Member party thereto pursuant to the related Addendum to the Master Backup Services Agreement.

"Master Backup Servicer" means Wells Fargo Bank, National Association pursuant to the Master Backup Services Agreement.

"Master Lease" means that certain Master Lease, dated as of September 4, 2015, by and between the [***] Lessor Project Company and the [***] Tenant Project Company.

"Master Purchase Agreement" means each master purchase agreement by and between a Partnership Flip Project Company and the Sponsor pursuant to which the Sponsor agreed to arrange for the design, procurement and installation of certain PV Systems for the applicable Partnership Flip Project Company and the applicable Partnership Flip Project Company agreed to purchase such PV Systems from the Sponsor for fair market value, as established by a third-party appraisal, and to take assignment of the associated Customer Agreements.


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"Master Turnkey Installation Agreement" means an agreement with a third-party solar installation contractor pursuant to which each PV System was designed, permitted, constructed, installed and tested either by Sunrun or such third-party solar installation contractor.

"Minimum Denomination" means, with respect to any Class A Note, [***] ([$[***]]) and with respect to any Class B Note, [***] ([$[***]])).

"MOMA" means, with respect to each Project Company (other than the [***] Project Companies) a Master Operation, Maintenance and Administration Agreement, and with respect to [***] Tenant Project Company, an Amended and Restated Maintenance Service Agreement, pursuant to which the Operator is responsible, primarily at its cost and expense, for performing specified Project Services.

"Multi-Employer Plan" means a multi-employer plan, as defined in Section 4001(a)(3) of ERISA to which the Issuer or any ERISA Affiliate is making or accruing an obligation to make contributions or has within any of the preceding five plan years made or accrued an obligation to make contributions.

"Multiple Employer Plan" shall mean a Single Employer Plan, to which the Issuer or any ERISA Affiliate, and one or more employers other than the Issuer or an ERISA Affiliate, is making or accruing an obligation to make contributions or, in the event that any such plan has been terminated, to which the Issuer or an ERISA Affiliate made or accrued an obligation to make contributions during any of the five plan years preceding the date of termination of such plan.

"Net Metering Agreement" means, with respect to a PV System, as applicable, a contractual or other obligation between a utility and a Host Customer (and, in some cases, the owner of the related PV System) that allows the Host Customer to offset its regular utility electricity purchases by receiving a bill credit at a specified rate for energy generated by such PV System that is exported to the utility electrical grid and not consumed by the Host Customer on its property. A Net Metering Agreement may be embedded or acknowledged in an Interconnection Agreement.

"Net Scheduled Payment“ means, for any calendar month, an amount equal to (i) the sum of (a) the Scheduled Host Customer Payment for such Solar Asset (except for a Closing Date Delinquent Solar Asset which shall have a Scheduled Host Customer Payment of $[***]) during such calendar month and (b) the Scheduled PBI Payment for such Solar Asset during such calendar month, minus (ii) the Allocated Services Provider Fee for such calendar month.

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“Non-Advanced Solar Asset” means a Solar Asset that does not meet one or more of the criteria required to be an Eligible Solar Asset as of the date the Depositor makes the representation with respect thereto.

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"Non-PTO Customer Agreement" means a Customer Agreement related to a PV System that has not received permission to operate from the related Host Customer's electric utility company.

"Non-Sequential Interest Amortization Period" means any period in which a Sequential Interest Amortization Period is not in effect.

"Note" or "Notes" means, collectively, the Class A Notes and the Class B Notes.

"Note Depository Agreement" means the letter of representations, dated as of the Closing Date, by the Issuer to DTC relating to the Book-Entry Notes.

"Note Interest" means: (i) with respect to the Class A Notes and any Payment Date, an amount equal to the sum of (a) interest accrued during the related Interest Accrual Period at the related Note Rate on the Outstanding Note Balance of the Class A Notes immediately prior to such Payment Date and (b) the amount of unpaid Note Interest for the Class A Notes from prior Payment Dates plus, to the extent permitted by law, interest thereon at the related Note Rate; and (ii) with respect to the Class B Notes and (a) any Payment Date occurring during a Non-Sequential Interest Amortization Period, an amount equal to the sum of (1) interest accrued during the related Interest Accrual Period at the related Note Rate on the Outstanding Note Balance of the Class B Notes immediately prior to such Payment Date and (2) the amount of unpaid Note Interest for the Class B Notes from prior Payment Dates plus, to the extent permitted by law, interest thereon at the related Note Rate, and (b) any Payment Date occurring during a Sequential Interest Amortization Period, an amount equal to zero.

"Note Owner" means, with respect to a Book-Entry Note, the Person who is the beneficial owner of such Book-Entry Note, as reflected on the books of the Securities Depository or on the books of a Person maintaining an account with such Securities Depository (directly as a Securities Depository Participant or as an indirect participant, in each case in accordance with the rules of such Securities Depository) or the Person who is the beneficial owner of such Book-Entry Note, as reflected in the Note Register in accordance with Section 2.07 of the Indenture.

"Note Purchase Agreement" means that certain note purchase agreement dated December 11, 2018, among the Issuer, the Depositor, Sunrun and the Initial Purchasers.

"Note Rate" means, with respect to the Class A Notes and the Class B Notes, a per annum rate of 5.31% and 7.50%, respectively.

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“Note Register” and “Note Registrar” have the meanings specified in Section 2.07 of the Indenture.

“Noteholder” or “Noteholders” means the Person in whose name a Note is registered in the Note Register.

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"Noteholder FATCA Information" means information sufficient to eliminate the imposition of, or determine the applicable amount of, U.S. withholding tax under FATCA.

"Noteholder Tax Identification Information" means properly completed and signed tax certifications (generally, in the case of U.S. Federal Income Tax, IRS Form W-9 (or applicable successor form) in the case of a person that is a "United States Person" within the meaning of Section 7701(a)(30) of the Code or the appropriate IRS Form W-8 (or applicable successor form), together with any required attachments, establishing an applicable reduction in or an exemption from U.S. withholding taxes, in the case of a person that is not a "United States Person" within the meaning of Section 7701(a)(30) of the Code).

"Notice of Prepayment" means the notice in the form of Exhibit C-1 to the Indenture.

"Notice of Redemption" means the notice in the form of Exhibit C-2 to the Indenture.

"NRSRO" means a nationally recognized statistical rating organization.

"NRSRO Certification" means certification by a NRSRO that permits it to access a 17g-5 Website.

"O&M Fee" means a quarterly fee owed to the Operator pursuant to each MOMA equal to the product of (i) [***]% of the Base Rate and (ii) the DC kilowatt of installed nameplate capacity of all PV Systems owned by the related Project Company (other than certain excluded PV Systems).

"O&M Services" means the operations and maintenance services required to be performed by the Operator pursuant to the terms of each MOMA.

"OFAC" has the meaning set forth in Section 3.12(w) of the Indenture.

"Offering Circular" means that certain Confidential Offering Circular dated December 11, 2018 related to the Notes.

"Officer's Certificate" means a certificate signed by an Authorized Officer.

"Operator" means Sunrun, in its capacity as operator under each MOMA.

"Operator Fee" means, collectively, the O&M Fees and Administrative Fees owed to the Operator under each MOMA.

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“Opinion of Counsel” means a written opinion of counsel who may, except as otherwise expressly provided in the Indenture, be outside counsel for the Issuer or the Indenture Trustee and who shall be reasonably satisfactory to the Indenture Trustee, which shall comply with any

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applicable requirements of Section 12.02 of the Indenture and which shall be in form and substance satisfactory to the Indenture Trustee.

“Optional Redemption” has the meaning set forth in Section 6.02(a) of the Indenture.

“Optional Redemption Date” has the meaning set forth in Section 6.02(a) of the Indenture.

“Original Managing Member Owner” means with respect to (x) the Managing Members of each Partnership Flip Project Company, Sunrun [***] Portfolio [***], LLC, (y) the Managing Member of each [***] Project Company, [***] Solar Intermediate I, LLC, and (z) the Managing Member of Athena 2018 Project Company, Sunrun [***] Portfolio [***], LLC, each, a Delaware limited liability company.

“Originator” means Sunrun.

“Outstanding” means, as of any date of determination, all Notes theretofore authenticated and delivered under the Indenture except:

(i) Notes theretofore canceled by the Note Registrar or delivered to the Note Registrar for cancellation;

(ii) Notes or portions thereof for whose payment money in the necessary amount in prepayment thereof has been theretofore deposited with the Indenture Trustee in trust for the Holders of such Notes;

(iii) Notes in exchange for or in lieu of which other Notes have been authenticated and delivered pursuant to the Indenture; and

(iv) Notes alleged to have been destroyed, lost or stolen for which replacement Notes have been issued as provided for in Section 2.09 of the Indenture unless proof satisfactory to the Indenture Trustee is presented that any such Notes are held by a bona fide purchaser;

provided, however, that in determining whether the Noteholders of the requisite percentage of the Outstanding Note Balance have given any request, demand, authorization, direction, notice, consent or waiver hereunder, Notes owned by Sunrun, the Issuer or any Affiliate thereof shall be disregarded and deemed not to be Outstanding, except that, in determining whether the Indenture Trustee shall be protected in relying upon any such request, demand, authorization, direction, notice, consent, or waiver, only Notes which the Indenture Trustee actually knows to be so owned shall be so disregarded. Notes so owned which have been pledged in good faith may be regarded as Outstanding if the pledgee establishes to the satisfaction of the Indenture Trustee, in its sole discretion, the pledgee's right so to act with respect to such Notes and that the pledgee is not Sunrun, the Issuer or any Affiliate thereof.

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"Outstanding Note Balance" means, with respect to any Class of Notes, as of any date of determination, the Initial Outstanding Note Balance of such Class of Notes less the sum of all note principal payments actually distributed to the Noteholders of such Class of Notes as of such date which have not been returned to the Issuer or to any other Person for any reason.

"Ownership Interest" means, with respect to any Note, any ownership interest in such Note, including any interest in such Note as the Noteholder thereof and any other interest therein, whether direct or indirect, legal or beneficial.


"Partnership Flip Project Company LLCA" means the limited liability company agreement (as amended, restated or supplemented from time to time) of [***] Project Company, [***] Project Company, [***] Project Company and [***] Project Company, as applicable.

"Payment Date" means the 30th day of each January, April, July and October, beginning in January 2019; provided, if any such day is not a Business Day, then the payments due thereon shall be made on the next succeeding Business Day.

"Payment Facilitation Agreement" means each modification, waiver or amendment agreement (including a replacement Customer Agreement) entered into by the Operator in accordance with the requirements, if any, of the applicable Project Company Documents.

"Payment Facilitation Agreement Standard" means a Payment Facilitation Agreement which meets the following criteria: (i) such Payment Facilitation Agreement is entered into for a commercially reasonable purpose in an arm's-length transaction on market terms and in accordance with the Transaction Management Standard and the requirements, if any, of the applicable Project Company Documents, (ii) in the reasonable judgment of the Transaction Manager, the Payment Facilitation Agreement is in the best interest of the Issuer and the Noteholders and does not adversely impact the value of such Solar Asset relative to the value of such Solar Asset had such Payment Facilitation Agreement not been completed, (iii) the Transaction Manager has considered the obligation of the Issuer to make an Unscheduled Note Principal Payment in connection with a Payment Facilitation Agreement that results in a Payment Facilitation Amount and (iv) in a case where such Payment Facilitation Agreement results in a Payment Facilitation Amount, if the related Solar Asset is a Defaulted Solar Asset or, in the judgment of the Transaction Manager, the Host Customer related to such Solar Asset could reasonably be expected to stop making the Host Customer Payments due under the related Customer Agreement but for such Payment Facilitation Agreement.

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"Payment Facilitation Amount" means for any Solar Asset for which a Payment Facilitation Agreement has been completed, an amount equal to the excess, if any, of (i) the

- 53 -

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Securitization Share of DSAB of such Solar Asset immediately prior to such Payment Facilitation Agreement being completed (which includes any past due amounts), over (ii) the Securitization Share of DSAB of such Solar Asset immediately after completion of such Payment Facilitation Agreement. For the avoidance of doubt, the Scheduled Host Customer Payments to be used in the calculation of clause (ii) will be the payment schedule attached to the completed Payment Facilitation Agreement.

"PBI Documents" means with respect to a PV System located in the State of Connecticut or the State of Colorado, (i) all applications, forms and other filings required to be submitted to a PBI Obligor in connection with the performance based incentive program maintained by such PBI Obligor and the procurement of PBI Payments, and (ii) all approvals, agreements and other writings evidencing (a) that all conditions to the payment of PBI Payments by the PBI Obligor have been met, (b) that the PBI Obligor is obligated to pay PBI Payments and (c) the rate and timing of such PBI Payments.

"PBI Liquidated Damages" means any liquidated damages due and payable to a PBI Obligor in respect of a Solar Asset.

"PBI Payments" means, with respect to a PV System located in the State of Connecticut or the State of Colorado and the related PBI Documents, all payments due by the related PBI Obligor under or in respect of such PBI Documents.

"PBI Obligor" means a utility or federal, state or local Governmental Authority that maintains or administers a renewable energy program designed to incentivize the installation of PV Systems and use of solar generated electricity that has approved and is obligated to make PBI Payments to the owner of the related PV System.

"Perfection UCCs" means, with respect to the Conveyed Property, (i) to the extent applicable, the date-stamped original of the filed Sunrun Financing Statement covering the Conveyed Property, (ii) to the extent applicable, the date-stamped original of the filed Sunrun Athena Holdco Financing Statement covering the Conveyed Property, (iii) to the extent applicable, the date-stamped original of the filed Sunrun Athena Investor Financing Statement covering the Conveyed Property, (iv) the date-stamped original of the filed Depositor Financing Statement covering the Conveyed Property, (v) the date-stamped original of the filed Issuer Financing Statement covering the Trust Estate and (vi) the date-stamped original of the filed Termination Statements releasing the Liens held by creditors of Sunrun and any other Person (other than as expressly contemplated by the Transaction Documents) covering the Conveyed Property, or, in the case of this clause (vi), a copy of search results performed and certified by a national search company indicating that such Termination

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Statements have been filed in the UCC filing offices of the States in which the financing statements being terminated were originally filed.

"Performance Based Incentive Agreement" has the meaning set forth in paragraph 25(b) of Schedule I to the Depositor Sale and Contribution Agreement.

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"Performance Guarantor" means Sunrun.

"Performance Guaranty" means that certain performance guaranty, dated as of the Closing Date, made by the Performance Guarantor in favor of the Issuer and the Indenture Trustee.

"Permits" means, with respect to any PV System, the applicable franchises, licenses, leases, permits, approvals, notifications, certifications, registrations, authorizations, exemptions, qualifications, easements, rights of way, liens and other rights, privileges and approvals required to be obtained from a Governmental Authority under any law, rule or regulation (including those required to interconnect such PV System to the applicable transmission grid).

"Permitted Liens" means (i) any lien for taxes, assessments and governmental charges or levies not yet due and payable or which are being contested in good faith by appropriate proceedings and (ii) any other lien or encumbrance arising under or permitted by the Transaction Documents.

"Person" means any individual, corporation, partnership, joint venture, association, limited liability company, limited liability partnership, joint stock company, trust (including any beneficiary thereof), unincorporated organization or Governmental Authority.

"Plan" means an employee pension benefit plan which is covered by Title IV of ERISA or subject to the minimum funding standards under Section 412 of the Code as to which the Issuer or any Affiliate may have any liability.

"Post-Closing Certification" has the meaning set forth in Section 4(b) of the Custodial Agreement.

"Power Purchase Agreement" means an agreement between the owner of the PV System and a Host Customer whereby the Host Customer agrees to purchase electricity produced by such PV System for a fixed fee per kWh or for a fixed monthly payment.

"Predecessor Notes" means, with respect to any particular Note, every previous Note evidencing all or a portion of the same debt as that evidenced by such particular Note; and, for the purpose of this definition, any Note authenticated and delivered under Section 2.09 of the Indenture in lieu of a lost, destroyed or stolen Note shall be deemed to evidence the same debt as the lost, destroyed or stolen Note.

"Prepayment Amount" has the meaning set forth in Section 6.01(a) of the Indenture.

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"Primary Tax Loss Insurance Policy" means the insurance policy whereby, subject to the terms thereof, the related Master Tax Loss Policy Insurers agree to pay the Sponsor or the applicable loss payee for Losses.

"Priority of Payments" has the meaning given such term in Section 5.05(a) of the Indenture.

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“Proceeding” means any suit in equity, action at law or other judicial or administrative proceeding.

“Project Company” means each of the Partnership Flip Project Companies, [***] Project Companies and Athena 2018 Project Company.

“Project Company Documents” means, with respect to (a) (1) any Partnership Flip Project Company, the related (i) Partnership Flip Project Company LLC, (ii) Master Purchase Agreement, (iii) MOMA, (iv) Limited Guaranty, (v) Addendum to the Master Backup Services Agreement and (vi) Blocked Account Control Agreement; and (2) [***] Project Company and [***] Project Company, the Letter Agreement, (b) the [***] Project Companies, the (i) [***]Lessor Project Company LLC, (ii) [***] Tenant Project Company LLC, (iii) related MOMA, (iv) ECCA, (v) related Limited Guaranty, (vi) Master Lease and (vii) related Addendum to the Master Backup Services Agreement and (c) Athena 2018 Project Company, the related (i) Project Company LLC, (ii) MOMA and (iii) Addendum to the Master Backup Services Agreement, in each case, as amended, waived, extended, or modified in accordance with the terms thereof.

“Project Company Expenses” means, except to the extent payable by the Operator and not reimbursable by a Project Company pursuant to a MOMA, all expenses incurred for the operation of any Project Company or the PV Systems and any reserves that, in the reasonable judgment of the related Managing Member, are necessary or appropriate for payment of such expenses, including but not limited to (i) the amount payable in respect of any invoice received under the related MOMA (other than in respect of the fees described in clause (iii)), (ii) expenses and/or premiums related to insurance required pursuant to the related Project Company Documents, (iii) the Operator Fees and the fees and expenses under the related MOMA or those of any replacement operator, (iv) costs due to tax preparation or audit services for such Project Company and any other expense incurred for any taxes or filing fees of such Project Company, (v) fees and expenses under the Master Backup Services Agreement related to such Project Company, and (vi) funding of any operation and maintenance reserve accounts in accordance with the related Project Company Documents. In no event shall Tax Equity Investor Distributions be deemed to be Project Company Expenses.

“Project Company LLC” means the limited liability company agreement of each Project Company.

“Project Company Members” means, respect to (i) each Partnership Flip Project Company and [***] Tenant Project Company, the related Managing Member and the related Tax Equity

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Investor Member, (ii) [***] Lessor Project Company, the related Managing Member and [***] Tenant Project Company and (iii) Athena 2018 Project Company, the related Managing Member.

"Project Company Reduction Amount" means for any Payment Date, in connection with any Project Company with respect to which any Project Company Reduction Event has occurred

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during the related Collection Period, the product of (x) [***]% and (y) (i) if the Issuer has acquired the membership interests of the related Tax Equity Investor Member through exercise of the related Purchase Option or the Withdrawal Option, or in the case of the Athena 2018 Project Company, an amount equal to the sum of the Discounted Solar Asset Balances of all Solar Assets owned by such Project Company or (ii) if the Issuer has not acquired the membership interests of the related Tax Equity Investor Member through exercise of the related Purchase Option or the Withdrawal Option, the sum of the Securitization Share of DSAB of all Solar Assets owned by such Project Company (other than Closing Date Delinquent Solar Assets), (in the case of either (i) or (ii), measured as of the last day of the Collection Period during which such event occurred; provided that if the related Project Company Reduction Event has been cured or waived in accordance with the Indenture, then such Project Company Reduction Amount (or any unpaid portion thereof) shall thereupon be reduced to zero dollars ($0)).

"Project Company Reduction Event" means, with respect to any Project Company, (i) if any of several actions relating to the insolvency of such Project Company or the related Managing Member shall have occurred, including the appointment of a conservator or receiver or liquidator relating to such Project Company or such Managing Member or all or substantially all of their respective property which is consented to or remains in effect; (ii) if its Tax Equity Investor Member shall have removed the related Managing Member as managing member of such Project Company pursuant to the related Project Company LLCA, provided that such Project Company Reduction Event shall be deemed cured if a replacement managing member of such Project Company is appointed pursuant to the related Project Company LLCA and approved by the Majority Noteholders of the Controlling Class; (iii) if such Project Company or the related Managing Member shall become taxable as an association (or publicly traded partnership taxable as a corporation) for U.S. federal or state income tax purposes; and (iv) there shall remain in force, undischarged, unsatisfied, and unstayed for more than 30 consecutive days, any final non-appealable judgment in the amount of $[***] or more not covered by insurance against such Project Company or the related Managing Member.

"Project Services" means the O&M Services and the Administrative Services.

"Purchase Option" means, with respect to any Project Company LLCA (other than the Project Company LLCA for the Athena 2018 Project Company and the [***] Lessor Project Company), the right of the related Managing Member or its designated Affiliate to purchase the related Tax Equity Investor Member's interest in the Partnership Flip Project Company or [***] Tenant Project Company, as applicable.

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"PV System" means, with respect to a Solar Asset, a residential electricity generating photovoltaic system, including photovoltaic panels, racks, wiring and other electrical devices, conduit, weatherproof housings, hardware, one or more inverters, remote monitoring system, communication system, connectors, meters, disconnects, over current devices and, if applicable, energy storage devices (including any replacement or additional parts included from time to time).

"PV System Purchase Price" means the purchase price for each PV System purchased under the Master Purchase Agreement, as specified in the appraisal in effect as of the date of purchase of the applicable PV System for the relevant state (or other location) in which the applicable PV System is located.

"QIB" means qualified institutional buyer within the meaning of Rule 144A.

"Quarterly Transaction Report" has the meaning set out in Section 4.1 of the Transaction Management Agreement.

"Rated Final Maturity" means the Payment Date occurring in April 2049.

"Rating Agency" means Kroll Bond Rating Agency, Inc.

"Rating Agency Condition" means, for purposes of Section 5.02(d) and Section 5.03(d) of the Indenture, satisfaction of the following conditions: (i) the Issuer (or the Transaction Manager on behalf of the Issuer) shall have provided the Rating Agency with written notification that it desires to substitute moneys otherwise required to be deposited into the Liquidity Reserve Account or Supplemental Reserve Account with a Letter of Credit with details regarding the terms of such Letter of Credit and the proposed Eligible Letter of Credit Bank; and (ii) (a) the Rating Agency shall have (1) provided a Rating Agency Confirmation or (2) informed the Issuer that it declines to review such Letter of Credit or (b) the Issuer (or the Transaction Manager on behalf of the Issuer) shall have provided an Officer's Certificate to the Indenture Trustee that (1) the Issuer has not received any response from the Rating Agency after the Issuer (or the Transaction Manager on behalf of the Issuer) has repeatedly solicited (by telephone and by email) a response from the Rating Agency, (2) more than 15 Business Days have passed since the initial written notification to the Rating Agency and (3) that the Issuer has no reason to believe that the action would result in (A) a withdrawal of the credit rating on the Class A Notes by the Rating Agency or (B) the assignment of a credit rating on the Class A Notes by the Rating Agency below the lower of (x) the then-current credit rating on the Class A Notes or (y) the initial credit rating assigned to the Class A Notes by the Rating Agency (in each case, without negative implications).

"Rating Agency Confirmation" means with respect to any request, action, event or circumstance a confirmation from the Rating Agency that the fulfillment of such requests or the

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taking of such action or the occurrence of such event of circumstance will not itself result in (i) a withdrawal of the credit rating on the Class A Notes by the Rating Agency or (ii) the assignment of a credit rating on the Class A Notes by the Rating Agency below the lower of (a) the then-current credit rating on the Class A Notes or (b) the initial credit rating assigned to the Class A Notes by the Rating Agency (in each case, without negative implications).

"Record Date" means, with respect to any Payment Date, Voluntary Prepayment Date or Optional Redemption Date, (i) for Notes in book-entry form, the close of business on the Business Day immediately preceding such Payment Date, Voluntary Prepayment Date or Optional Redemption Date and (ii) for Definitive Notes, the close of business on the last Business Day of

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the calendar month immediately preceding the calendar month in which such Payment Date, Voluntary Prepayment Date or Optional Redemption Date occurs.

"Regulation S" means Regulation S, as amended, promulgated under the Securities Act.

"Regulation S Global Note" means the Regulation S Temporary Global Note or the Regulation S Permanent Global Note, as appropriate.

"Regulation S Permanent Global Note" means the permanent global note, evidencing Notes, in the form of the Note attached to the Indenture as Exhibit A-1 or Exhibit A-2, that is deposited with and registered in the name of the Securities Depository or its nominee, representing the Notes sold in reliance on Regulation S.

"Regulation S Temporary Global Note" means a single temporary global note, evidencing Notes, in the form of the Note attached to the Indenture as Exhibit A-1 or Exhibit A-2, that is deposited with and registered in the name of the Securities Depository or its nominee, representing the Notes sold in reliance on Regulation S.

"Regular Amortization Period" means any period other than an Early Amortization Period or a period in which a Sequential Interest Amortization Period is in effect.

"Reinvestment Yield" means the yield on U.S. Treasury securities having a remaining term to maturity that is closest to the weighted average remaining life of the Class A Notes (calculated to the Make Whole Determination Date) plus 0.50%. Should more than one U.S. Treasury security have a term to maturity that is closest to the weighted average life of the Class A Notes, then the yield of the U.S. Treasury security quoted closest to par will be used in the calculation.

"Replacement Transaction Manager" means any Person appointed to replace the Transaction Manager and to assume the obligations of Transaction Manager under the Transaction Management Agreement (other than such obligations with respect to the Tax Loss Insurance Policies to the extent such Person does not agree to assume such obligations).

"Reportable Event" means a reportable event as defined in Section 4043 of ERISA and the regulations issued under such Section, with respect to a Plan, excluding, however, such events as to which the Pension Benefit Guaranty Corporation by regulation or by public notice waived the requirement of Section 4043(a) of ERISA that it be notified within thirty (30) days of the occurrence of such event, provided, that a failure to meet the minimum funding standard of Section 412 of the Code and of Section 302 of ERISA shall be a Reportable Event regardless of the issuance of any such waivers in accordance with either Section 4043(a) of ERISA or Section 412(d) of the Code.

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“Responsible Officer” means when used with respect to the Indenture Trustee, the Transaction Transition Manager or the Custodian, any Vice President, any Assistant Vice President, any Assistant Secretary, any Assistant Treasurer, any Corporate Trust Officer or any

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other officer of the Indenture Trustee, the Transaction Transition Manager or the Custodian customarily performing functions similar to those performed by any of the above-designate officers, in each case having direct responsibility for the administration of the Indenture, the Manager Transition Agreement or Custodial Agreement, as applicable. When used with respect to any Person other than the Indenture Trustee, the Transaction Transition Manager and the Custodian, that is not an individual, the President, any Vice President or Assistant Vice President or the Controller of such Person, or any other officer or employee having similar functions.

"Risk Retention Interest" means the entire limited liability company membership interest of the Issuer.

"Rule 17g-5" means Rule 17g-5 under the Exchange Act.

"Rule 144A" means the rule designated as "Rule 144A" promulgated by the Securities and Exchange Commission under the Securities Act.

"Rule 144A Global Notes" means the Notes sold within the U.S. in reliance on Rule 144A as represented by Global Notes.

"Rule 144A Information" means the information required to be delivered pursuant to Rule 144A(d)(4) under the Securities Act to permit compliance with Rule 144A in connection with resales of the Notes pursuant to Rule 144A.

"S&P" means S&P Global Ratings, a business unit of Standard & Poor's Financial Services, LLC.

"Schedule of Solar Assets" means the schedule of Solar Assets related to PV Systems owned by the Project Companies, which schedule is attached to the Depositor Contribution Agreement, the Indenture and the Transaction Management Agreement, in each case as such schedule may be amended from time to time in accordance with the terms of the Transaction Documents.

"Scheduled Host Customer Payments" means for each applicable Solar Asset, the payments scheduled to be paid by a Host Customer during each calendar month in respect of the initial term of the related Customer Agreement, as set forth on Schedule II to the Indenture, as the same may be adjusted by the Transaction Manager to account for any prepayment made in respect of any Solar Asset, a Payment Facilitation Agreement being entered in connection with respect to such Solar Asset or any Solar Asset becoming a Defaulted Solar Asset, a Terminated Solar Asset or a Defective Solar Asset. The Scheduled Host Customer Payments exclude any amounts attributable to sales, use or property taxes to be collected from Host Customers.

- 65 -

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"Scheduled Note Principal Payment" means for any Class of Notes and any Payment Date, an amount equal to the sum of: (i) any unpaid portion of the Scheduled Note Principal Payments for such Class of Notes from prior Payment Dates, and (ii) the product of (a)(1) the Scheduled Outstanding Note Balance of such Class of Notes for the prior Payment Date minus (2) the Scheduled Outstanding Note Balance of such Class of Notes for such Payment Date; and (b) a fraction (1) the numerator of which is equal to the Outstanding Note Balance of such Class of Notes (without taking into account any distributions to be made on such Payment Date) minus the unpaid portion of the Scheduled Note Principal Payments of such Class of Notes from prior Payment Dates and (2) the denominator of which is the Scheduled Outstanding Note Balance of such Class of Notes for the prior Payment Date.

"Scheduled Outstanding Note Balance" means for each Class of Notes and each Payment Date, the amount set forth as the Scheduled Outstanding Note Balance on Schedule IV to the Indenture.

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"Scheduled PBI Payments" means for each Solar Asset for each Collection Period, the payments scheduled to be paid by a PBI Obligor during such Collection Period, if any, as set forth on Schedule III to the Indenture, as the same may be adjusted by the Transaction Manager to reflect that such Solar Asset has become a Defaulted Solar Asset, a Cancelled Solar Asset, a Terminated Solar Asset or a Defective Solar Asset.

"Projected Tax Equity Investor Distributions" means for any calendar quarter, the amounts projected to be distributed to the Tax Equity Investor Members based on Scheduled Host Customer Payments and Scheduled PBI Payments, assuming that no Purchase Options are exercised and no Limited Step-up Events occur, but assuming that the Withdrawal Option is exercised, as set forth in Schedule V to the Indenture.

"Securities Act" means the Securities Act of 1933, as amended.

"Securities Depository" means an organization registered as a "Securities Depository" pursuant to Section 17A of the Exchange Act.

"Securities Depository Participant" means a broker, dealer, bank, other financial institution or other Person for whom from time to time a Securities Depository effects book-entry transfers and pledges of securities deposited with the Securities Depository.

"Securitization Share of DSAB" means, with respect to a Solar Asset as of any date of determination, the amount equal to the product of:

(i) the Discounted Solar Asset Balance of such Solar Asset;

and

(ii) for any Solar Asset:

   (a) owned by any Project Company (other than Athena 2018 Project Company) as to which the related Flip Date has occurred but as to which the Issuer has not acquired the membership interests of the related Tax Equity Investor Member through exercise of the related Purchase Option or the Withdrawal Option, [***]%;

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(b) owned by Athena 2018 Project Company or any other Project Company as to which the Issuer has acquired the membership interests of the related Tax Equity Investor Member through exercise of the related Purchase Option or the Withdrawal Option, [***]%; and

(c) owned by any Project Company not described in clauses (a) or (b) above, [***]%.

"Sequential Interest Amortization Period" means the period commencing:

(i) on any Determination Date if the DSCR for such Determination Date is less than or equal to 1.00;

(ii) on any Determination Date, if an Event of Default shall have occurred; or

(iii) on any Determination Date, if as a result of the replacement of the Operator of any Project Company, the aggregate Project Company Expenses for all of the Project Companies in respect of the related Collection Period is more than [***]% greater than what the Project Company Expenses would have been for such Collection Period had the Operator for any Project Company not been replaced.

A Sequential Interest Amortization Period caused by an event described in clause (i) above shall continue until the next Determination Date on which the DSCR is greater than 1.00. A Sequential Interest Amortization Period caused by an event described in clause (ii) above shall continue until all Events of Default have been cured or waived in accordance with the Indenture. A Sequential Interest Amortization Period caused by an event described in clause (iii) above shall continue until the next Determination Date on which the aggregate Project Company Expenses for all of the Project Companies in respect of the related Collection Period is no longer more than [***]% greater than what the Project Company Expenses would have been for such Collection Period had the Operator for any Project Company not been replaced.

"Similar Law" has the meaning set forth in Section 2.07(c)(v) of the Indenture.

"Single Employer Plan" means any "employee pension benefit plan" (as such term is defined in Section 3(2) of ERISA), other than a Multi-Employer Plan, that is subject to Title IV of ERISA or Section 412 of the Code and is sponsored or maintained by the Borrower or any ERISA Affiliate or for which the Issuer or any ERISA Affiliate may have liability by reason of being deemed to be a contributing sponsor under Section 4069 of ERISA.

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“Solar Asset” means one of the Solar Assets identified on the Schedule of Solar Assets and consists of (i) a PV System installed on a residential property, (ii) all related rights, Permits and manufacturer, installer and other warranties (in each case, to the extent transferable), (iii) all rights and remedies of the lessor/seller under the related Customer Agreement, including all Host Customer Payments on and after the Cut-Off Date and any related security therefor, (iv) all rights and remedies of the payee of any PBI Payments related to such PV System on and after the Cut-Off Date, and (v) all documentation related to such PV System, the Customer Agreement and PBI Documents, if any.

“Solar Asset Management Files” means such files, documents, and computer files (including those documents comprising the Custodian File) necessary for the Transaction Manager to perform the Management Services.

“Solar Asset Payment Ratio” means, for any Determination Date, (i) all Host Customer Payments and PBI Payments actually collected by each Project Company during the related Collection Period and the immediately preceding Collection Period, divided by (ii) the sum of all Scheduled Host Customer Payments and Scheduled PBI Payments for such Collection Periods (expressed as a percentage).

“Sponsor” means Sunrun.

“State” means any one or more of the states comprising the United States and the District of Columbia.

“Subcontractor” means any person to whom the Transaction Manager subcontracts any of its obligations under the Transaction Management Agreement, including the vendors and any person to whom such obligations are further subcontracted of any tier.

“Sunrun” means Sunrun Inc., a Delaware corporation.

“Sunrun Athena Holdco” means Sunrun Athena Holdco 2018-1, LLC, a Delaware limited liability company.

“Sunrun Athena Holdco Financing Statement” means with respect to Sunrun Athena Holdco, the UCC-1 financing statement naming the Indenture Trustee as the secured party, Sunrun Athena Holdco as debtor, and Sunrun Athena Investor, the Depositor and the Issuer as intermediate assignors.

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"Sunrun Athena Investor" means Sunrun Athena Investor 2018-1, LLC, a Delaware limited liability company.

"Sunrun Athena Investor Financing Statement" means with respect to Sunrun Athena Investor, the UCC-1 financing statement naming the Indenture Trustee as the secured party.

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“Sunrun Financing Statement” means, with respect to Sunrun, the UCC-1 financing statement naming the Indenture Trustee as the secured party, Sunrun as debtor, and Sunrun Athena Holdco, Sunrun Athena Investor, the Depositor and the Issuer as intermediate assignors.

“Sunrun Party” means any of Sunrun, Sunrun Athena Holdco, Sunrun Athena Investor, the Depositor or the Issuer.

“Super-Majority Noteholders” means Noteholders representing not less than 66-2/3% of the Outstanding Note Balance of, as the context shall require, a Class of Notes or all Classes of Notes then Outstanding.

“Supplemental Reserve Account” has the meaning set forth in Section 5.01(a) of the Indenture.

“Supplemental Reserve Account Deposit” means, for any Payment Date, an amount equal to (1) on or after the January 2024 Payment Date, the sum of (i) any Supplemental Reserve Account Deposit amounts from prior periods not deposited into the Supplemental Reserve Account, and (ii) the lesser of (a) the product of (A) one-quarter of $[***] and (B) the aggregate DC nameplate capacity (measured in kW) of all the PV Systems owned by the Project Companies (excluding Defaulted Solar Assets that are not operational and not in the process of being removed or redeployed) on the related Determination Date and (b) the Supplemental Reserve Account Required Balance as of the related Determination Date minus the sum of the amount on deposit in the Supplemental Reserve Account as of the related Determination Date, and the amount, if any, being deposited into the Supplemental Reserve Account on such Payment Date pursuant to clause (i) and (2) prior to the January 2024 Payment Date, zero. Notwithstanding the foregoing, the Supplemental Reserve Account Deposit will be zero for any Payment Date on which the sum of Available Funds is greater than or equal to the sum of (i) the payments and distributions required under clauses (i) through (iv) in the Priority of Payments and (ii) the Aggregate Outstanding Note Balance as of such Payment Date prior to any distributions made on such Payment Date.

“Supplemental Reserve Account Closing Date Deposit” means an amount equal to $[***].

“Supplemental Reserve Account Required Balance” means an amount equal to the sum of (i) for any Payment Date prior to the date on which each applicable Managing Member (or Sunrun on its behalf as Limited Guarantor) of each of [***] Project Company and [***] Project Company has made its final true-up payment to the applicable Tax Equity Investor Member, $[***], and (ii) the product of (a) $[***] and (b) the aggregate DC nameplate capacity (measured in kW) of all PV

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Systems owned by the Project Companies (excluding Defaulted Solar Assets that are not operational and not in the process of being removed or redeployed) on the related Determination

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Date that have related Customer Agreements with remaining terms that exceed the remaining terms of the related manufacturer warranty for the inverter associated with such PV System.

"Tax" (and, with correlative meaning, "Taxes" and "Taxable") means:

(i) any taxes, customs, duties, charges, fees, levies, penalties or other assessments imposed by any federal, state, local or foreign taxing authority, including, but not limited to, income, gross receipts, windfall profit, severance, property, production, sales, use, license, excise, franchise, net worth, employment, occupation, payroll, withholding, social security, alternative or add-on minimum, ad valorem, transfer, stamp, or environmental tax, or any other tax, custom, duty, fee, levy or other like assessment or charge of any kind whatsoever, together with any interest, penalty, addition to tax, or additional amount attributable thereto; and

(ii) any liability for the payment of amounts with respect to payment of a type described in clause (i), including as a result of being a member of an affiliated, consolidated, combined or unitary group, as a result of succeeding to such liability as a result of merger, conversion or asset transfer or as a result of any obligation under any tax sharing arrangement or tax indemnity agreement.

"Tax Equity Investor Distributions" means the aggregate distributions made by the Project Companies to the Tax Equity Investor Members in respect of the related Collection Period, including any distribution of cash to the applicable Tax Equity Investor Member in respect of the related Collection Period as a result of the occurrence of a Limited Step-up Event; provided that distributions that are scheduled to be paid to the Tax Equity Investor Members in respect of any Collection Period shall be treated as having been paid during such Collection Period so long as such distributions are made no later than the related Determination Date.

"Tax Equity Investor Member" means with respect to each Partnership Flip Project Company and [***] Tenant Project Company, the member of such Project Company to whom substantially all of the tax benefits of ownership of the related PV Systems and a portion of cash are allocated.

"Tax Law Change True-Up Contributions" means an amount in cash that the Sponsor is obligated to contribute, that, when contributed to the applicable Partnership Flip Project Company and distributed to the applicable Tax Equity Investor Member, and after taking into account all resulting tax costs or benefits, preserves investment targets reflected in the original base case model.

"Tax Loss Insurance Policies" means the Master Tax Loss Insurance Policy and the [***] Tax Loss Insurance Policy, as applicable.

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"Tax Loss Policy Insurer" means each Master Tax Loss Policy Insurer, each Excess Tax Loss Policy Insurer and the [***] Tax Loss Policy Insurer.

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"Tax Loss Insurance Proceeds Account" has the meaning set forth in Section 5.01 of the Indenture.

"Tax Opinion" means an Opinion of Counsel to the effect that an amendment or modification of the Indenture will not materially adversely affect the federal income taxation of any Class A Note as debt for federal income tax purposes, or adversely affect the federal tax classification status of the Issuer.

"Tax Returns" means any return, report or similar statement required to be filed with respect to any Taxes (including attached schedules), including any IRS Form K-1 issued by the Issuer, information return, claim for refund, amended return or declaration of estimated Tax.

"Terminated Solar Asset" means (i) a Solar Asset for which the related PV System has experienced an Event of Loss and is not repaired, restored, replaced or rebuilt to substantially the same condition as it existed immediately prior to the Event of Loss within 180 days of such Event of Loss or (ii) is deemed to be a Terminated Solar Asset by the Transaction Manager in accordance with the Transaction Management Agreement.

"Termination Date" means the date on which the Indenture Trustee shall have received payment and performance of all Issuer Secured Obligations.

"Termination Statement" has the meaning set forth in Section 2.12(i) of the Indenture.

"Total Debt Service" means for each Payment Date an amount equal to the sum of (i) the Class A Note Interest plus the Class B Note Interest (in all cases, assuming that such Payment Date occurs during a Regular Amortization Period) and (ii) the Scheduled Note Principal Payment, in each case for the related Payment Date.

"Transaction Documents" means, collectively, the Indenture, the Contribution Agreements, the Performance Guaranty, the Transaction Management Agreement, the Manager Transition Agreement, the Managing Member Pledge Agreement, the Note Purchase Agreement, the Custodial Agreement, the Acknowledgments and the Note Depository Agreement.

"Transaction Management Agreement" means that certain Transaction Management Agreement, dated as of the Closing Date, between the Transaction Manager and the Issuer.

"Transaction Management Services" has the meaning set forth in Section 2.1(a) of the Transaction Management Agreement.

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“Transaction Management Standard” has the meaning set forth in Section 2.1(a) of the Transaction Management Agreement.

“Transaction Manager” means Sunrun as the initial Transaction Manager or any other Replacement Transaction Manager acting as Transaction Manager pursuant to the Transaction.

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Management Agreement. Unless the context otherwise requires, "Transaction Manager" also refers to any successor Transaction Manager appointed pursuant to the Transaction Management Agreement.

"Transaction Manager Fee" means for each Payment Date (in accordance with and subject to the Priority of Payments) an amount equal to $[***], which will be increased by [***]% on January 1 of each year commencing on January 1, 2020.

"Transaction Manager Termination Event" has the meaning set forth in Section 5.1 of the Transaction Management Agreement.

"Transfer" means any direct or indirect transfer or sale of any Ownership Interest in a Note.

"Transferee" means any Person who is acquiring by Transfer any Ownership Interest in a Note.

"Transferee Letter" means a letter in the form of Exhibit B to the Indenture executed by a Transferee in connection with a Transfer.

"Transaction Transition Manager" means Wells Fargo as the Transaction Transition Manager under the Manager Transition Agreement.

"Transaction Transition Manager Expenses" means any reasonable documented out-of-pocket expenses incurred in taking actions required in its role as Transaction Transition Manager and any indemnities owed to the Transaction Transition Manager in accordance with the Manager Transition Agreement.

"Transaction Transition Manager Fee" means for each Payment Date (in accordance with and subject to the Priority of Payments), an amount equal to $[***].

"Trust Estate" means all property and rights of the Issuer Granted to the Indenture Trustee pursuant to the Granting Clause of the Indenture for the benefit of the Noteholders.

"UCC" means the Uniform Commercial Code as adopted in the State of New York or in any other State having jurisdiction over the assignment, transfer, pledge of the Solar Assets from the Originator to the Depositor, the Depositor to the Issuer or of the Trust Estate from the Issuer to the Indenture Trustee.

"Unscheduled Note Principal Payment" means for any Payment Date means an amount equal to the sum of:

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(i) the product of (a) [***]% and (b) the sum of:

- 78 -

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(1) the sum of the applicable Securitization Share of DSAB of each Solar Asset (other than any Non-Advanced Solar Asset) that became a Terminated Solar Asset during the related Collection Period (such Securitization Share of DSAB measured immediately prior to the Solar Asset becoming a Terminated Solar Asset);

(2) the sum of the applicable Securitization Share of DSAB of each Solar Asset (other than any Non-Advanced Solar Asset) that became a Defaulted Solar Asset during the related Collection Period (such Securitization Share of DSAB measured immediately prior to the Solar Asset becoming a Defaulted Solar Asset);

(3) the sum of the applicable Securitization Share of DSAB of each Solar Asset (other than any Non-Advanced Solar Asset) that became a Cancelled Solar Asset during the related Collection Period (such Securitization Share of DSAB measured immediately prior to the Solar Asset becoming a Cancelled Solar Asset);

(4) the sum of for each Solar Asset (other than any Non-Advanced Solar Asset) as to which a Customer or PBI Obligor has elected to prepay all or any portion of any remaining expected payments due under the related Customer Agreement or PBI Agreement (i) the applicable Securitization Share of DSAB of such Solar Asset (measured immediately prior to such prepayment), over (ii) the applicable Securitization Share of DSAB of such Solar Asset (measured immediately after such prepayment);

(5) the sum of the applicable Securitization Share of DSAB of each Solar Asset (other than any Non-Advanced Solar Asset) for which the related Host Customer has exercised its option, if any, during the related Collection Period to purchase the related PV System prior to the expiration of the term of the related Customer Agreement (such Securitization Share of DSAB measured immediately prior to the exercise of such purchase option); and

(6) any Payment Facilitation Amounts with respect to the related Collection Period;

(ii) any Project Company Reduction Amount with respect to the related Collection Period;

(iii) Liquidated Damages Amounts paid for any Solar Assets during the related Collection Period; and

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(iv) any unpaid portion of Unscheduled Note Principal Payments from prior Payment Dates.

- 80 -

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"[*] Project Company" means each of [*] Lessor Project Company and [*] Tenant Project Company.

"[*] Lessor Project Company" means Sunrun [*] Owner [*], LLC, a Delaware limited liability company.

"[*] Lessor Project Company LLCA" means the amended and restated operating agreement of [*] Lessor Project Company, dated as of September 4, 2015.

"[*] Purchase Option Period" means the nine-month period following the end of the five year period from the placement in service of the last PV System leased by [*] Tenant Project Company or any longer period during which the ITC claimed by [*] Tenant Project Company is subject to recapture pursuant to the Code.

"[*] Tenant Project Company" means Sunrun [*] Tenant [*], LLC, a Delaware limited liability company.

"[*] Tenant Project Company LLCA" means the amended and restated operating agreement of [*] Tenant Project Company, dated as of September 4, 2015.

"[*] Conveyed Property" means the property distributed, contributed and sold under the [*] Distribution, Contribution and Sale Agreement.

"[*] Distribution, Contribution and Sale Agreement" means the distribution, contribution and sale agreement, dated as of the Closing Date, by and among, Sunrun, [*], LLC, Sunrun Athena Holdco, Sunrun Athena Investor and the Depositor.

"Vice President" means, with respect to Sunrun or the Indenture Trustee, any vice president, whether or not designated by a number or a word or words added before or after the title "vice president."

"Voluntary Prepayment" has the meaning set forth in Section 6.01(a) of the Indenture.

"Voluntary Prepayment Date" has the meaning set forth in Section 6.01(a) of the Indenture.

"Wells Fargo" means Wells Fargo Bank, National Association, a national banking association.

- 81 -

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"Withdrawal Option" means, with respect to the [***] Tenant Project Company LLCA, the right of the Tax Equity Investor Member to resign and voluntarily withdraw from [***] Tenant Project Company during the nine months following the expiration of the [***] Purchase Option Period.

"[***] Conveyed Property" means the property distributed, contributed and sold under the [***] Distribution, Contribution and Sale Agreement.

"[***] Distribution, Contribution and Sale Agreement" means the distribution, contribution and sale agreement, dated as of the Closing Date, by and among, Sunrun, Sunrun, [***] Holdco [***], LLC, Sunrun [***] Portfolio [***], LLC, Sunrun Athena Holdco, Sunrun Athena Investor, the Depositor and Sunrun Athena Manager 2018, LLC.

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FOURTH AMENDMENT TO
SECOND AMENDED AND RESTATED CREDIT AGREEMENT

This FOURTH AMENDMENT TO SECOND AMENDED AND RESTATED CREDIT AGREEMENT, dated as of November 30, 2018 (this “Amendment”), is entered into among the undersigned in connection with that certain Second Amended and Restated Credit Agreement, dated as of March 27, 2018, among Sunrun Hera Portfolio 2015-A, LLC, a Delaware limited liability company, as Borrower (the “Borrower”), the financial institutions as Lenders from time to time party thereto (the “Lenders”), and Investec Bank PLC, as Administrative Agent for the Lenders (in such capacity, the “Administrative Agent”) and as Issuing Bank (in such capacity, the “Issuing Bank”) (as in effect prior to the date hereof, the “Credit Agreement” and as amended by this Amendment, the “Amended Credit Agreement”). Capitalized terms which are used but not otherwise defined herein shall have the meanings ascribed to such terms in the Amended Credit Agreement and the rules of construction set forth in Section 1.02 of the Credit Agreement apply to this Amendment.

WITNESSETH

WHEREAS, the Borrower wishes to make, and the undersigned wish to agree to make, certain amendments to the Credit Agreement as provided herein.

NOW, THEREFORE, in consideration of the mutual agreements, provisions and covenants contained herein and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereto agree as follows:

I. Amendments to the Credit Agreement. Subject to the satisfaction of the conditions set forth in Article II below, the following amendments to the Credit Agreement are hereby accepted and agreed by the parties hereto:

1. Amendment to Section 1.01. The following defined term in Section 1.01 of the Credit Agreement is hereby amended and restated in its entirety as follows:

   “Exhibit S Effective Date” means November 30, 2018.”

2. Amendment to Section 6.13(j). Section 6.13(j) of the Credit Agreement is hereby amended and restated in its entirety as follows:

   “(j) From and after the Exhibit S Effective Date, the provisions set forth in Exhibit S shall be deemed to replace this Section 6.13 in its entirety.”

3. Amendment to Exhibit S. Exhibit S to the Credit Agreement is hereby replaced in its entirety with Schedule I to this Amendment.

II. Conditions Precedent to Effectiveness. The amendments contained in Article I shall not be effective until the date (such date, the “Amendment Effective Date”) that:

______________________________
1. the Administrative Agent shall have received copies of this Amendment executed by the Borrower and the Required Lenders, and acknowledged by the Administrative Agent; and

2. the Borrower shall have paid all fees, costs and expenses of the Administrative Agent and the Lenders incurred in connection with the execution and delivery of this Amendment (including third-party fees and out-of-pocket expenses of the Lenders’ counsel and other advisors or consultants retained by the Administrative Agent).

III. Representations and Warranties. The Borrower represents and warrants to each Agent and each Lender Party that the following statements are true, correct and complete in all respects as of the Amendment Effective Date:

1. Power and Authority; Authorization. The Borrower has all requisite power and authority to execute, deliver and perform its obligations under this Amendment and the Borrower has all requisite power and authority to perform its obligations under the Amended Credit Agreement. The Borrower has duly authorized, executed and delivered this Amendment.

2. Enforceability. Each of this Amendment and the Amended Credit Agreement is a legal, valid and binding obligation of the Borrower, enforceable against the Borrower in accordance with its terms, except to the extent that enforceability may be limited by (i) applicable bankruptcy, insolvency, moratorium, reorganization or other similar laws affecting the enforcement of creditors’ rights, (ii) the effect of general equitable principles (regardless of whether such enforceability is considered in a proceeding in equity or at law) or (iii) implied covenants of good faith and fair dealing.

3. Credit Agreement Representations and Warranties. Each of the representations and warranties set forth in the Credit Agreement (with respect to the Borrower) is true and correct in all respects both before and after giving effect to this Amendment, except to the extent that any such representation and warranty relates solely to any earlier date, in which case such representation and warranty is true and correct in all respects as of such earlier date.

4. Defaults. No event has occurred or is continuing as of the date hereof, or will result from the transactions contemplated hereby as of the date hereof, that would constitute an Event of Default or a Default.

IV. Limited Amendment. Except as expressly set forth herein, this Amendment shall not, by implication or otherwise, limit, impair, constitute a waiver of or otherwise affect the rights and remedies of the Lenders or the other Secured Parties under the Credit Agreement or any other Loan Document, and shall not alter, modify, amend or in any way affect any of the terms, conditions, obligations, covenants or agreements contained in the Credit Agreement or any other provision of the Credit Agreement or any other Loan Document, and the Borrower acknowledges and agrees that each of the Loan Documents to which it is a party or otherwise bound shall continue in full force and effect and that all of its obligations thereunder shall be valid and enforceable and shall not be impaired or limited by the execution or effectiveness of this Amendment. From and after the Amendment Effective Date, all references to the Credit Agreement in any Loan Document shall, unless expressly provided otherwise, refer to the Amended Credit Agreement.
V. Miscellaneous.

1. **Counterparts.** This Amendment may be executed in one or more duplicate counterparts and by facsimile or other electronic delivery and by different parties on different counterparts, each of which shall constitute an original, but all of which shall constitute a single document and when signed by all of the parties listed below shall constitute a single binding document.

2. **Severability.** In case any one or more of the provisions contained in this Amendment should be invalid, illegal or unenforceable in any respect, the validity, legality and enforceability of the remaining provisions shall not in any way be affected or impaired thereby, and the parties hereto shall enter into good faith negotiations to replace the invalid, illegal or unenforceable provision.

3. **Governing Law, etc.** THIS AMENDMENT SHALL BE GOVERNED BY, AND CONSTRUED UNDER, THE LAWS OF THE STATE OF NEW YORK. The provisions in Sections 12.08(b) through (d) and Section 12.09 of the Amended Credit Agreement shall apply, mutatis mutandis, to this Amendment and the parties hereto.

4. **Loan Document.** This Amendment shall be deemed to be a Loan Document for all purposes of the Amended Credit Agreement and each other Loan Document.

5. **Headings.** Paragraph headings have been inserted in this Amendment as a matter of convenience for reference only and it is agreed that such paragraph headings are not a part of this Amendment and shall not be used in the interpretation of any provision of this Amendment.

6. **Execution of Documents.** The undersigned Lenders hereby authorize and instruct the Administrative Agent to execute and deliver this Amendment.

[Signature Pages Follow]
IN WITNESS WHEREOF, the parties hereto have caused this Amendment to be duly executed and delivered by their duly authorized officers as of the day and year first above written.

SUNRUN HERA PORTFOLIO 2015-A, LLC,

as Borrower
By: Sunrun Hera Portfolio 2015-B, LLC
Its: Sole Member
By: Sunrun Hera Holdco 2015, LLC
Its: Sole Member
By: Sunrun Inc.
Its: Sole Member

By: /s/ Robert Komin Jr.
Name: Robert Komin, Jr.
Title: Chief Financial Officer

[Signature Page to Fourth Amendment (2nd A&R AF Credit Agreement)]
INVESTEC BANK PLC,
as Administrative Agent

By: /s/ Andrew Nosworthy
Name: Andrew Nosworthy
Title: Authorized Signatory

By: /s/ Stefan Rattensperger
Name: Stefan Rattensperger
Title: Authorized Signatory

[Signature Page to Fourth Amendment (2nd A&R AF Credit Agreement)]
INVESTEC BANK PLC,

as Issuing Bank

By: /s/ Andrew Nosworthy
Name: Andrew Nosworthy
Title: Authorized Signatory

By: /s/ Stefan Rattensperger
Name: Stefan Rattensperger
Title: Authorized Signatory

[Signature Page to Fourth Amendment (2nd A&R AF Credit Agreement)]
INVESTEC BANK PLC,
as Lender

By: /s/ Andrew Nosworthy
Name: Andrew Nosworthy
Title: Authorized Signatory

By: /s/ Stefan Rattensperger
Name: Stefan Rattensperger
Title: Authorized Signatory

[Signature Page to Fourth Amendment (2nd A&R AF Credit Agreement)]
KEYBANK NATIONAL ASSOCIATION,
as Lender

By: /s/ Lisa A. Ryder
Name: Lisa A. Ryder
Title: Senior Vice President

[Signature Page to Fourth Amendment (2nd A&R AF Credit Agreement)]
SUNTRUST BANK,
as Lender

By: /s/ Brian Guffin
Name: Brian Guffin
Title: Managing Director

[Signature Page to Fourth Amendment (2nd A&R AF Credit Agreement)]
SILICON VALLEY BANK,
as Lender

By:__/s/ Chaitali ("Tai") Pimputkar__
Name: Chaitali ("Tai") Pimputkar
Title: Vice President II

[Signature Page to Fourth Amendment (2nd A&R AF Credit Agreement)]
SUNRUN GAIA PORTFOLIO 2016-A, LLC,

as Lender

By: Sunrun Gaia Holdeco 2016, LLC
Its: Sole Member

By: Sunrun Inc.
Its: Sole Member

By: /s/ Robert Komin, Jr.
Name: Robert Komin, Jr.
Title: Chief Financial Officer

[Signature Page to Fourth Amendment (2\textsuperscript{nd} A&R AF Credit Agreement)]
ABN AMRO CAPITAL USA LLC,
as Lender

By: /s/ Paul Snow
Name: Paul Snow
Title: Director

By: /s/ John Sullivan
Name: John Sullivan
Title: Managing Director

[Signature Page to Fourth Amendment (2nd A&R AF Credit Agreement)]
BANKUNITED, N.A.,
as Lender

By: /s/ Justin P. Allbright
Name: Justin P. Allbright
Title: Senior Vice President

[Signature Page to Fourth Amendment (2nd A&R AF Credit Agreement)]
EAST WEST BANK,

as Lender

By: /s/ Christopher Simeone

Name: Christopher Simeone
Title: First Vice President

[Signature Page to Fourth Amendment (2\textsuperscript{nd} A&R AF Credit Agreement)]
Schedule I

[see attached]
Section 6.13 Maintenance of Insurance.

(a) Until the Debt Termination Date, the Borrower shall procure and maintain or cause to be procured and maintained by the applicable Operator or Manager pursuant to the applicable Tax Equity Documents, and provide the Administrative Agent with acceptable evidence (in form and substance reasonably satisfactory to the Administrative Agent in consultation with the Insurance Consultant) of the existence of the types and amounts of insurance required to be maintained pursuant to the applicable Tax Equity Documents. In the event that the Tax Equity Documents do not establish guidelines for minimum levels of insurance and/or there are no underlying Tax Equity Documents, as would be the case for Wholly Owned Opcos, the Borrower shall procure and maintain or cause to be procured and maintained by the applicable Operator or Manager (i) insurance of the types and amounts that are consistent with prudent industry practices for residential PV solar portfolios similar in size, location and exposure; (ii) insurance in form and substance satisfactory to the Required Lenders in consultation with the Insurance Consultant (including any recommendations of the Insurance Consultant for amendments in existing and/or proposed insurance coverages); and (iii) provide the Administrative Agent with acceptable evidence (in form and substance reasonably satisfactory to the Administrative Agent in consultation with the Insurance Consultant) of the existence of the types and amounts of insurance required (including any recommendations of the Insurance Consultant for amendments in existing and/or proposed insurance coverages). The types and amounts of insurance required pursuant to this Section 6.13(a) shall be referred to insurance policies required pursuant to collectively as the “Insurance Policies”.

(b) With respect to all property insurance (including any excess or difference in conditions policies, if applicable) required pursuant to Section 6.13(a):

(i) The Borrower, the Relevant Parties and each of their members shall be included as either the “named insured” or an additional “named insured”.

(ii) The Borrower hereby waives, and shall cause the Relevant Parties and each of their members to waive, any rights of subrogation against the Secured Parties and shall cause any such property Insurance Policies to include or be endorsed to include a similar waiver of subrogation in favor of the Secured Parties.

(iii) The Secured Parties shall be included as additional insureds on all such property Insurance Policies insuring Wholly Owned Opcos.

(iv) The Collateral Agent for the benefit of the Secured Parties shall be named as the “sole” loss payee on all such Insurance Policies insuring Wholly
Owned Opcos pursuant to a lender loss payable endorsement acceptable to the Administrative Agent in consultation with the
Insurance Consultant.

(i) To the extent commercially available, such Insurance Policies shall be endorsed to provide at least thirty (30) days’ prior written notice (or ten (10) days’ prior notice if such cancellation is due to failure to pay premiums) of cancellation to the Administrative Agent. If such endorsement for notice of cancellation shall not be commercially available, the Borrower shall be obligated to provide the required written notice of cancellation to the Administrative Agent.

(c) With respect to all liability insurance required pursuant to Section 6.13(a):

(i) Such Insurance Policies shall include the Borrower, the Relevant Parties and each of their members as an additional “named insured”

(ii) Such Insurance Policies shall include an endorsement to the policy naming (or providing via blanket endorsements as required by written contract) the Administrative Agent, and the Lenders, and their respective permitted successors, assigns, members, directors, officers, employees, lenders, investors, representatives and Administrative Agents as additional insureds on a primary and non-contributory basis.

(iii) The Borrower hereby waives, and shall cause the Relevant Parties and each of their members to waive, any rights of subrogation against the Secured Parties and shall cause any such liability Insurance Policies to include or be endorsed to include a similar waiver of subrogation in favor of the Secured Parties.

(iv) Such Insurance Policies shall include a severability of interest or separation of insureds clause with no material exclusions for cross-liability clause (to the extent commercially available).

(v) To the extent commercially available, such Insurance Policies shall be endorsed to provide at least thirty (30) days’ prior written notice (or ten (10) days’ prior notice if such cancellation is due to failure to pay premiums) of cancellation to the Administrative Agent. If such endorsement for notice of cancellation shall not be commercially available, the Borrower shall be obligated to provide the required written notice of cancellation to the Administrative Agent.

(d) The Borrower, the Wholly Owned Opcos and/or the other Relevant Parties shall be responsible for covering or causing to be covered the costs of all insurance premiums and deductibles associated with the Insurance Policies.

(e) The Borrower and/or the Relevant Parties shall be obligated to request approval from the Administrative Agent for any material changes in the underlying insurance requirements established via the applicable Tax Equity Documents or as otherwise agreed for Wholly Owned Opcos or when the applicable Tax Equity Documents do not establish minimum levels of required insurance. In addition, The Borrower and/or the Relevant Parties shall be

[***] = Certain confidential information contained in this document, marked by brackets, is filed with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

Exhibit S-2
obligated to provide written notice of any material changes in the Insurance Policies. For the purposes of this Section 6.13(e), a “material change” shall be [***]

(f) Prior to the Closing Date and once each calendar year thereafter in conjunction with the renewal or replacement of the Insurance Policies, the Borrower and Relevant Parties shall provide detailed evidence of insurance (in a form reasonably acceptable to the Administrative Agent, in consultation with the Insurance Consultant) including certificates of insurance and copies of applicable insurance binders and policies (if requested), as well as a statement from the Borrower and/or its authorized insurance representative confirming that such insurance is in compliance with the terms and conditions of this Section 6.13, is in full force and effect and all premiums then due have been paid or are not in arrears.

(g) No provision of this Agreement shall impose on the Administrative Agent or any other Secured Party any duty or obligation to verify the existence or adequacy of the insurance coverage maintained by or on behalf of the Borrower, the Relevant Parties or their members, nor shall the Administrative Agent or any other Secured Party be responsible for any representations or warranties made by or on behalf of the Borrower, the Relevant Parties, their members or any other Person to any insurance agent or broker, insurance company or underwriter.

(h) The Insurance Policies shall include coverage addressing [***] or, if the applicable Tax Equity Limited Liability Company Agreements requires (or required) greater coverage, such coverage as may be required by such Tax Equity Limited Liability Company Agreement for the related Opco, determined as follows:

(i) No later than sixty (60) days after the “Completion Deadline” or the “Second Installment Payment Deadline” (as applicable) pursuant to such Tax Equity Limited Liability Company Agreement for the related Opco and, with respect to any Wholly Owned Opco, as applicable, (x) within sixty (60) days of the date of full deployment of the applicable Project Pool or (y) the date on which such Wholly Owned Opco is acquired or formed, the Borrower shall (A) cause EQECAT, Global Risk Myamoto, AIR-Worldwide, Risk Management Solutions Inc., Risk Placement Services, Inc. or another nationally recognized insurance or other applicable expert, reasonably approved by the Administrative Agent (in consultation with the Insurance Consultant), to perform a probable maximum loss analysis (or analyses) satisfying the standard described above with respect to the Projects owned by such Opco or Wholly Owned Opco and (B) deliver a copy thereof to the Administrative Agent and, if requested, the Insurance Consultant;

(ii) For Opcos and/or Wholly Owned Opcos for which such probable maximum loss analysis required in connection with such “Completion Deadline” or such “Second Installment Payment Deadline” or full deployment of the applicable Project Pool, as applicable, has been performed on or prior to the date hereof, the applicable Insurance Policies will include coverage satisfying the standard described above; and

[***] = Certain confidential information contained in this document, marked by brackets, is filed with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

Exhibit S-3
(iii) For Opcos and/or Wholly Owned Opcos for which such probable maximum loss analysis has not been
performed on or prior to the date such Opc or Wholly Owned Opc was formed or acquired, after such analysis is delivered
pursuant to clause (i) above, the Administrative Agent, the Borrower and each of the applicable Relevant Parties shall review such
probable maximum loss analysis (or analyses) and, the Borrower and the applicable Relevant Parties shall make appropriate
adjustments (in consultation with, and with the prior written approval of, the Administrative Agent (in consultation with the
Insurance Consultant)) to the types and amounts of insurance they maintain so as to satisfy the standard described above Section
6.13(a).

(i) If at any time the Borrower determines in its reasonable judgment that any insurance (including the limits or
deductibles thereof) required to be maintained by this Section 6.13 is not available on commercially reasonable terms due to prevailing
conditions in the commercial insurance market at such time, then upon the written request of the Borrower together with a written report of the
Borrower’s insurance broker or another independent insurance broker of nationally-recognized standing in the insurance industry (i) certifying
that such insurance is not available on commercially reasonable terms (and, in any case where the required maximum coverage is not
reasonably available, certifying as to the maximum amount which is so available), (ii) explaining in detail the basis for such broker’s
conclusions (including but not limited to the cost of obtaining the required coverage(s) as well as the proposed alternative coverage(s)), and
(iii) containing such other information as the Administrative Agent (in consultation with the Insurance Consultant) may reasonably request, the
Administrative Agent may (after consultation with the Insurance Consultant) temporarily waive such requirement and only to the extent that
the Borrower can demonstrate that such temporary waiver will not cause the Borrower or the Relevant Parties to be out of compliance with the
insurance requirements that were established by the Required Lenders in consultation with the Insurance Consultant for Wholly Owned Opcos
or the applicable Tax Equity Documents or that a similar waiver has been obtained under such Tax Equity Documents; provided, however, that
the Required Lenders, may in its sole judgment, decline to waive any such insurance requirement(s). At any time after the granting of any
temporary waiver pursuant to this Section 6.13 but not more than once in any year, the Administrative Agent may request, and the Borrower
shall furnish to the Administrative Agent within thirty (30) days after such request, an updated insurance report reasonably acceptable to the
Administrative Agent (in consultation with the Insurance Consultant) from the Sponsor’s independent insurance broker. Any waiver granted
pursuant to this Section 6.13 shall expire,without further action by any party, immediately upon (A) such waived insurance requirement
becoming available on commercially reasonable terms, as reasonably determined by the Administrative Agent, (in consultation with the
Insurance Consultant) or (B) failure of the Borrower to deliver an updated insurance report pursuant to clause (ii) above.without further action
by any party, immediately upon (A) such waived insurance requirement becoming available on commercially reasonable terms, as reasonably
determined by the Administrative Agent, (in consultation with the Insurance Consultant) or (B) failure of the Borrower to deliver an updated
insurance report pursuant to clause (ii) above.

[***] = Certain confidential information contained in this document, marked by brackets, is filed with the Securities and Exchange
Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

Exhibit S-4
Exhibit 10.38

AMENDMENT NO. 6 TO THE CREDIT AGREEMENT

THIS AMENDMENT NO. 6 TO THE CREDIT AGREEMENT, dated as of November 14, 2018 (this “Amendment”), is entered into by and among SUNRUN INC., a Delaware corporation (“Sunrun”), AEE SOLAR, INC., a California corporation (“AEE Solar”), SUNRUN SOUTH LLC, a Delaware limited liability company (“Sunrun South”), and SUNRUN INSTALLATION SERVICES INC., a Delaware corporation (“Sunrun Installation Services” and, together with Sunrun, AEE Solar and Sunrun South, each, a “Borrower” and, collectively, the “Borrowers”), CLEAN ENERGY EXPERTS, LLC, a California limited liability company (“CEE” and, together with the Borrowers, each, a “Loan Party” and, collectively, the “Loan Parties”), and each of the Persons identified as a “Lender” on the signature pages hereto (each, a “Lender”) and acknowledged by CREDIT SUISSE AG, CAYMAN ISLANDS BRANCH, as the Administrative Agent (the “Administrative Agent”).

RECITALS

WHEREAS, the Borrowers entered into the Credit Agreement, dated as of April 1, 2015 (as amended from time to time, the “Credit Agreement”), by and among the Borrowers, CEE, as a Guarantor, the Administrative Agent, the Lenders party thereto, Silicon Valley Bank, as the Collateral Agent, and Credit Suisse Securities (USA) LLC, as the Lead Arranger and Book Runner;

WHEREAS, pursuant to Section 11.01 of the Credit Agreement, no amendment to the Credit Agreement is effective unless executed by the Borrowers or the applicable Loan Party, as the case may be, and at least two (2) Lenders having Total Credit Exposures representing more than 50% of the Total Credit Exposures of all Lenders and acknowledged by the Administrative Agent;

WHEREAS, this Amendment is not otherwise prohibited by Section 11.01 of the Credit Agreement;

WHEREAS, the Lenders party to this Amendment have Total Credit Exposures representing more than 50% of the Total Credit Exposures of all Lenders under the Credit Agreement;

WHEREAS, the Borrowers and the Lenders party hereto desire to amend the Credit Agreement on the terms set forth herein; and

WHEREAS, the Administrative Agent, by execution of this Amendment is providing its acknowledgement required under Section 11.01 of the Credit Agreement;

NOW, THEREFORE, in consideration of good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereto, intending to be legally bound, agree as follows:

CPAM: 33259190.6
ARTICLE 1
DEFINITIONS

1.01 Definitions. Capitalized terms not otherwise defined herein shall have the meanings set forth in the Credit Agreement.

1.02 Rules of Interpretation. The rules of interpretation set forth in Section 1.02 of the Credit Agreement shall apply to this Amendment. Solely for purposes of convenience, an amendment to an existing provision of the Credit Agreement is shown in this Amendment with the text that is deleted from the provision (indicated textually in the same manner as the following example: deleted text) and the text that is added to the provision (indicated textually in the same manner as the following example: double-underlined text).

ARTICLE 2
AMENDMENTS

2.01 Amendments to Definitions.

(a) The definition of “Backlever Financing” set forth in Section 1.01 of the Credit Agreement is hereby deleted in its entirety and replaced with the following text:

“Backlever Financing” means Indebtedness for borrowed money incurred by an Excluded Subsidiary where (i) such Indebtedness is made pursuant to an accounts receivable financing, a factoring facility or other similar financing; (ii) such Indebtedness is incurred only with respect to Projects that have been Tranchéd or have been contributed or sold to such Excluded Subsidiary; (iii) any of the Loan Parties does not guaranty the payment of debt service for such Indebtedness; and (iv) the Person providing the financing for such Indebtedness maintains no interest in, right or title to any Available Take-Out (other than a Backlever Financing).

(b) The definitions of “Beneficial Ownership Certification” and “Beneficial Ownership Regulation” are hereby inserted into Section 1.01 of the Credit Agreement in the appropriate alphabetical order:

“Beneficial Ownership Certification” means a certification regarding beneficial ownership as required by the Beneficial Ownership Regulation.


(c) The definition of “Disposition” or “Dispose” set forth in Section 1.01 of the Credit Agreement is hereby deleted in its entirety and replaced with the following text:

“Disposition” or “Dispose” means the sale, transfer, license, lease or other disposition (including any Sale and Leaseback Transaction) of any property (or the granting of any option or other right to do any of the foregoing), including any sale, assignment, transfer or other disposal, with or without recourse, of any notes or accounts receivable or any rights
and claims associated therewith. **For the avoidance of doubt, an Investment permitted under Section 7.03 shall not constitute a Disposition.**

(d) The definition of “Excluded Subsidiaries” set forth in Section 1.01 of the Credit Agreement is hereby deleted in its entirety and replaced with the following text:

“Excluded Subsidiaries” means (i) those direct or indirect subsidiaries of Sunrun (a) in which Sunrun owns Equity Interests of less than fifty-one percent (51%), (b) that own, lease or finance (or any Subsidiary that is formed for such purpose) no assets other than specific Projects and related assets that are financed as a pool in a manner that is non-recourse to any of the Loan Parties (other than with respect to Guarantees of certain limited obligations of the Excluded Subsidiaries to which such Excluded Subsidiaries are party and which are not in respect of Indebtedness for borrowed money), pursuant to a guarantee permitted pursuant to Section 7.02(i) or (c) whose sole assets consist (x) of Equity Interests in Excluded Subsidiaries of the type described in the foregoing clause (b) or (y) direct or indirect interests in any other Excluded Subsidiaries of the type described in subclause (x) of this clause (c), or (d) created for or encumbered by SREC Transactions, and in the case of those subsidiaries described in clause (b), where either (A) committed financing or equity contribution proceeds are included in the calculation of Available Take-Out or (B) only to the extent of any remaining Tax Equity or Backlever Financing Commitments have been fully deployed and which Tax Equity or Backlever Financing Commitments are no longer included in the calculation of Available Take Out, or (ii) any existing or future acquired or formed Immaterial Subsidiary.

(e) The definition of “Project Back-Log” set forth in Section 1.01 of the Credit Agreement is hereby deleted in its entirety and replaced with the following text:

“Project Back-Log” means, as of a given date of determination, all originated Projects (excluding cash sale Projects) that have achieved Sunrun Sign-off as of such date of determination, as set forth in the Back-Log Spreadsheet; provided that Projects shall be removed from the Project Back-Log once Tax Equity Commitments have been drawn for that Project and the Project is sold to a Tax Equity Partnership or has otherwise been sold or contributed to an Excluded Subsidiary.

2.02 Amendment to Section 6.02(l). Section 6.02(l) of the Credit Agreement is hereby deleted in its entirety and replaced with the following text:

(1) **Additional Information.** Subject to Section 6.10(b), promptly, (i) such additional information regarding the business, financial, legal or corporate affairs of any Borrower or any Subsidiary thereof, or compliance with the terms of the Loan Documents, as the Administrative Agent, the Collateral Agent or any Lender may from time to time reasonably request; or (ii) information and documentation reasonably requested by the Administrative Agent or any Lender for purposes of compliance with applicable “know your customer” requirements under the PATRIOT Act or other applicable anti-money laundering laws.
2.03 Amendment to Section 6.03. Section 6.03 of the Credit Agreement is hereby deleted in its entirety and replaced with the following text:

(a) Promptly, but in any event within three (3) Business Days of obtaining knowledge thereof, notify the Administrative Agent and each Lender of the occurrence of any Default; and

(b) Promptly, but in any event within four (4) Business Days of obtaining knowledge thereof, notify the Administrative Agent and each Lender of:

(i) any matter that has resulted or could reasonably be expected to result in a Material Adverse Effect; and

(ii) any time that a Loan Party or any Subsidiary has given to, or received from, a counterparty to a Tax Equity Commitment or Backlever Financing formal written notice under the documents governing the applicable Tax Equity Commitments or Backlever Financing stating that a default or event of default has occurred and is continuing thereunder, or has knowledge of the occurrence and continuation of such default or event of default but has not given such formal written notice; provided that such counterparty would have the right to cease funding, and has not waived such right to cease funding, if such default or event of default remains uncured; and

(c) Promptly, but in any event within two (2) Business Days of the occurrence thereof, notify the Administrative Agent and each Lender of any change in the information provided in the Beneficial Ownership Certificate that would result in a change to the list of beneficial owners identified in parts (c) or (d) of such certification.

Each notice pursuant to this Section 6.03 shall be accompanied by a statement of a Responsible Officer of the applicable Borrower setting forth details of the occurrence referred to therein and to the extent applicable, stating what action such Borrower has taken and proposes to take with respect thereto. Each notice pursuant to Section 6.03(a) shall describe with particularity any and all provisions of this Agreement and any other Loan Document that have been breached.

2.04 Amendment to Section 7.01(i). Section 7.01(i) of the Credit Agreement is hereby deleted in its entirety and replaced with the following text:

(i) Liens securing Indebtedness permitted under (x) Section 7.02(c)-(i), provided that (i) such Liens do not at any time encumber any property, assets or revenues other than the property, assets or revenues financed by such Indebtedness and (ii) the Indebtedness secured thereby does not exceed the cost or fair market value at the time of the acquisition, whichever is lower, of the property being acquired on the date of acquisition and (y) under Section 7.02(c)(ii), provided that such Liens do not at any time encumber any property other than property, assets or revenues that are the subject of the applicable repo transaction;

2.05 Amendment to Section 7.02(c). Section 7.02(c) of the Credit Agreement is hereby deleted in its entirety and replaced with the following text:

4
(c) Indebtedness (i) in respect of Capitalized Leases, Synthetic Lease Obligations and purchase money obligations for fixed or capital assets within the limitations set forth in Section 7.01(i) or (ii) in respect of any repo transaction with respect to Indebtedness of an Excluded Subsidiary; provided, however, that the aggregate principal amount of all Indebtedness of the Loan Parties incurred in reliance on this clause (c) and clause (p) below at any time outstanding shall not exceed $40,000,000;

2.06 Amendment to Section 7.02(i). Section 7.02(i) of the Credit Agreement is hereby deleted in its entirety and replaced with the following text:

(i) any Borrower’s limited guarantees, indemnification obligations and obligations to make capital contributions to or repurchase assets of the Excluded Subsidiaries (including Equity Interests of Excluded Subsidiaries) as required under the documents evidencing the Tax Equity Commitments, Backlever Financing, SREC Transactions, or System Refinancing, as the case may be, so long as (i) such limited guarantees, indemnification and capital contribution obligations are not made in respect of obligations to repay debt for borrowed money and, (ii) if any Borrower is required to make a payment or contribution in connection with such obligations, after giving effect to such payment or contribution on a Pro Forma Basis, (x) the Loan Parties shall be in compliance with each of the financial covenants set forth in Section 7.11 and (y) no Borrowing Base Deficiency shall exist;

2.07 Amendment to Section 7.03(i). Section 7.03(i) of the Credit Agreement is hereby deleted in its entirety and replaced with the following text:

(i) Investments (x) in Excluded Subsidiaries or in Tax Equity Investors that would meet the requirements of clause (b) of the “Excluded Subsidiaries” definition if such Tax Equity Investors were deemed Excluded Subsidiaries (including any subsidiaries of such Tax Equity Investors created in connection with any tax equity transaction), in each case, in accordance with the applicable Tax Equity Documents, tax equity transaction, Backlever Financing or System Refinancing, as the case may be, in the ordinary course of business, (y) in Excluded Subsidiaries of PV Systems which are in operation as collateral to secure accounts receivable financing in which the net proceeds (after deduction of reasonable fees and expenses) are distributed to any Borrower or (z) in Excluded Subsidiaries as permitted pursuant to any repurchase of assets permitted by Section 7.02(i);

ARTICLE 3
REPRESENTATIONS AND WARRANTIES

Each Loan Party represents and warrants to each of the Lenders and the Administrative Agent, on the date hereof, that the following statements are true and correct:

3.01 Existence. Such Loan Party is duly organized or formed, validly existing and, as applicable, in good standing under the Laws of the jurisdiction of its incorporation or organization.

3.02 Power and Authority. Such Loan Party has the requisite power and authority to execute and deliver this Amendment.
3.03 Due Authorization. The execution, delivery and performance of this Amendment have been duly authorized by all necessary corporate or limited liability company action on the part of such Loan Party. The applicable resolutions of such Loan Party authorize the execution, delivery and performance of this Amendment by such Loan Party and are in full force and effect without modification or amendment.

3.04 Binding Obligation. This Amendment has been duly executed and delivered by such Loan Party, and this Amendment and the Credit Agreement, as amended by this Amendment, constitute the legally valid and binding obligation of such Loan Party, enforceable against such Loan Party in accordance with the terms of this Amendment and the Credit Agreement, subject to applicable bankruptcy, insolvency, reorganization, moratorium or similar laws affecting creditors’ rights generally and subject to general principles of equity, regardless of whether such enforceability is considered in a proceeding in equity or at law.

3.05 No Default or Event of Default. As of the date hereof, no event has occurred and is continuing or would result from the consummation of the amendments contemplated by this Amendment that would constitute a Default or an Event of Default.

3.06 Representations and Warranties. The representations and warranties of the Borrowers and each other Loan Party contained in the Credit Agreement or any other Loan Document, are (i) with respect to representations and warranties that contain a materiality qualification, true and correct in all respects, and (ii) with respect to representations and warranties that do not contain a materiality qualification, true and correct in all material respects, in each case, on and as of the date hereof (or if such representations and warranties expressly relate to an earlier date, as of such earlier date), and the representations and warranties contained in Sections 5.05(a) and (b) of the Credit Agreement are deemed to refer to the most recent statements furnished pursuant to Sections 6.01(a) and (b) of the Credit Agreement, respectively.

3.07 No Borrowing Base Deficiency or NYGB Borrowing Base Deficiency. No Borrowing Base Deficiency or NYGB Borrowing Base Deficiency exists as of the date hereof.

3.08 Material Adverse Effect. No Material Adverse Effect has occurred or is continuing since the date of the last audited financial statements furnished pursuant to Section 6.01(a) of the Credit Agreement.

3.09 Beneficial Ownership. The information included in the Beneficial Ownership Certificate is true and correct in all respects.

ARTICLE 4 CONDITIONS PRECEDENT

4.01 Conditions Precedent to Effectiveness. The amendments contained in Article 2 of this Amendment shall not be effective until the date (such date, the “Amendment Effective Date”) that the following conditions precedent have been satisfied or waived by the Required Lenders:

(a) The Administrative Agent shall have received copies of this Amendment executed by the Borrower and the applicable Lenders, and acknowledged by the Administrative Agent.
(b) The Borrowers shall have paid all fees, costs and expenses of the Administrative Agent and the Lenders incurred in connection with the execution and delivery of this Amendment (including fees and out-of-pocket expenses of the counsel and other advisors or consultants retained by the Administrative Agent).

(c) The Administrative Agent shall have received a certificate of a Responsible Officer of each Loan Party dated the Amendment Effective Date, in form and substance acceptable to the Administrative Agent, attaching and certifying as true, correct and complete: (i) the Organization Documents of each Loan Party (which, to the extent filed with a Governmental Authority, shall be certified as of a recent date by such Governmental Authority), (ii) the resolutions or other authorizations of the governing body of each Loan Party certified as being in full force and effect on the Amendment Effective Date, authorizing the execution, delivery and performance of this Amendment and any instruments or agreements required hereunder, (iii) a certificate of good standing, existence or its equivalent of each Loan Party certified as of a recent date by the appropriate Governmental Authority and (iv) the incumbency (including specimen signatures) of the Responsible Officers of each Loan Party.

(d) The Administrative Agent shall have received an opinion or opinions of counsel for the Loan Parties, dated the Amendment Effective Date and addressed to the Administrative Agent and the Lenders, in form and substance acceptable to the Administrative Agent.

(e) The Administrative Agent shall have received at least three Business Days prior to the Amendment Effective Date from any Borrower that qualifies as a “legal entity customer” under the Beneficial Ownership Regulation a Beneficial Ownership Certification in relation to such Borrower.

ARTICLE 5
GENERAL PROVISIONS

5.01 Notices. All notices and other communications given or made pursuant hereto shall be made as provided in the Credit Agreement.

5.02 Severability. In case any one or more of the provisions contained in this Amendment should be invalid, illegal or unenforceable in any respect, the validity, legality and enforceability of the remaining provisions shall not in any way be affected or impaired thereby, and the parties hereto shall enter into good faith negotiations to replace the invalid, illegal or unenforceable provision.

5.03 Headings. Section headings have been inserted in this Amendment as a matter of convenience for reference only and it is agreed that such paragraph headings are not a part of this Amendment and shall not be used in the interpretation of any provision of this Amendment.

5.04 Governing Law. This Amendment shall be governed by and construed in accordance with the law of the State of New York.
5.05 Counterparts. This Amendment may be signed in any number of counterparts and each counterpart shall represent a fully executed original as if signed by all of the parties listed below.

5.06 Ratification. Except as amended hereby, the Credit Agreement and the other Loan Documents remain in full force and effect.

5.07 Amended Terms. On and after the date hereof, all references to the Credit Agreement in each of the Loan Documents shall hereafter mean the Credit Agreement as amended by this Amendment. The execution, delivery and performance of this Amendment shall not constitute a waiver of any provision of, or operate as a waiver of any right, power or remedy of the Lenders, the Administrative Agent, the Collateral Agent or the Arranger under, the Credit Agreement or any other Loan Document. Nothing contained in this Amendment shall be construed as a substitution or novation of the obligations of the Loan Parties outstanding under the Credit Agreement or instruments securing the same, which obligations shall remain in full force and effect, except to the extent that the terms thereof are modified by this Amendment. Nothing expressed or implied in this Amendment shall be construed as a release or other discharge of the Loan Parties from any of their obligations or liabilities under the Credit Agreement or any other Loan Document.

5.08 Loan Document. This Amendment shall constitute a Loan Document under the terms of the Credit Agreement.

5.09 Costs and Expenses; Indemnification; Reimbursement. The parties hereto agree that this Amendment is subject to the costs and expenses, indemnification, reimbursement and related provisions set forth in Section 11.04 of the Credit Agreement.

5.10 Submission to Jurisdiction; Waiver of Venue; Service of Process; Waiver of Jury Trial. The submission to jurisdiction, waiver of venue, service of process and waiver of jury trial provisions set forth in Sections 11.14(b), (c) and (d) and 11.15 of the Credit Agreement, respectively, are hereby incorporated by reference, mutatis mutandis.

5.11 Reaffirmation of Guarantees and Security Interests. Each Loan Party hereby (a) affirms and confirms its guarantees, pledges, grants and other undertakings under the Credit Agreement, the Security Agreement and the other Loan Documents to which it is a party, and (b) agrees that all guarantees, pledges, grants and other undertakings thereunder shall continue to be in full force and effect and shall accrue to the benefit of the Secured Parties, including the Lenders.

[SIGNATURE PAGES FOLLOW]
IN WITNESS WHEREOF, the parties hereto have executed this Amendment as of the date first set forth above.

BORROWERS: SUNRUN INC.,
a Delaware corporation

By: /s/ Robert Komin, Jr.
Name: Robert Komin, Jr.
Title: Chief Financial Officer

AEE SOLAR, INC.,
a California corporation

By: /s/ Robert Komin, Jr.
Name: Robert Komin, Jr.
Title: Chief Financial Officer

SUNRUN SOUTH LLC,
a Delaware limited liability company

By: /s/ Robert Komin, Jr.
Name: Robert Komin, Jr.
Title: Chief Financial Officer

SUNRUN INSTALLATION SERVICES INC.,
a Delaware corporation

By: /s/ Jeanna Steele
Name: Jeanna Steele
Title: Secretary

GUARANTOR: CLEAN ENERGY EXPERTS, LLC,
a California limited liability company

By: /s/ Lynn Jurich
Name: Lynn Jurich
Title: President

[Signature Page to Amendment No. 6 – Credit Agreement]
CREDIT SUISSE AG, CAYMAN ISLANDS BRANCH,
as Administrative Agent and Lender
By: /s/ Mikhail Faybusovich
Name: Mikhail Faybusovich
Title: Authorized Signatory
By: /s/ Michael Del Genio
Name: Michael Del Genio
Title: Authorized Signatory

[Signature Page to Amendment No. 6 – Credit Agreement]
MORGAN STANLEY SENIOR FUNDING, INC.,
as Lender
By: /s/ Christopher Winthrop
Name: Christopher Winthrop
Title: Authorized Signatory

[Signature Page to Amendment No. 6 – Credit Agreement]
ROYAL BANK OF CANADA,

as Lender

By: /s/ Frank Lambrinos
Name: Frank Lambrinos
Title: Authorized Signatory

[Signature Page to Amendment No. 6 – Credit Agreement]
KEYBANK NATIONAL ASSOCIATION,
as Lender

By:  /s/ Richard Gerling
Name: Richard Gerling
Title: Senior Vice President

[Signature Page to Amendment No. 6 – Credit Agreement]
NY GREEN BANK,
a division of the New York State Energy Research & Development Authority,
as Lender

By:  /s/ Alfred Griffin
Name: Alfred Griffin
Title: President

[Signature Page to Amendment No. 6 – Credit Agreement]
HOMESTREET BANK,
as Lender

By: /s/ D.B. Westbrook
Name: D.B. Westbrook
Title: Senior Vice President

[Signature Page to Amendment No. 6 – Credit Agreement]
Consent of Independent Registered Public Accounting Firm

We consent to the incorporation by reference in the following Registration Statements:

- Form S-8 (No. 333-224806) pertaining to the Sunrun Inc. 2015 Equity Incentive Plan, Sunrun Inc. 2015 Employee Stock Purchase Plan
- Form S-3 (No. 333-222099) pertaining to the registration of common stock, preferred stock, debt securities, and warrants
- Form S-8 (No. 333-217869) pertaining to the Sunrun Inc. 2015 Equity Incentive Plan and Sunrun Inc. 2015 Employee Stock Purchase Plan
- Form S-8 (No. 333-211356) pertaining to the Sunrun Inc. 2015 Equity Incentive Plan and Sunrun Inc. 2015 Employee Stock Purchase Plan

of our reports dated February 28, 2019, with respect to the consolidated financial statements of Sunrun Inc. and the effectiveness of internal control over financial reporting of Sunrun Inc. included in this Annual Report (Form 10-K) of Sunrun Inc. for the year ended December 31, 2018.

/s/ Ernst & Young LLP
San Francisco, California
February 28, 2019
I, Lynn Jurich, certify that:

1. I have reviewed this Annual Report on Form 10-K of Sunrun Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant’s other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f) for the registrant and have:
   (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
   (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
   (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
   (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an Annual Report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
   (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant’s ability to record, process, summarize and report financial information; and
   (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant’s internal control over financial reporting.

Date: February 28, 2019

By: /s/ Lynn Jurich

Lynn Jurich
Chief Executive Officer and Director
(Principal Executive Officer)
CERTIFICATION PURSUANT TO
RULES 13a-14(a) AND 15d-14(a) UNDER THE SECURITIES EXCHANGE ACT OF 1934,
AS ADOPTED PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Bob Komin, certify that:

1. I have reviewed this Annual Report on Form 10-K of Sunrun Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant’s other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an Annual Report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant’s internal control over financial reporting.

Date: February 28, 2019

By: ____________________________

/s/ Bob Komin

Bob Komin
Chief Financial Officer
(Principal Accounting and Financial Officer)
Certifications Pursuant to
Section 906 of the Sarbanes-Oxley Act of 2002
(18 U.S.C. Section 1350)

Pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, each of the undersigned officers of Sunrun Inc. (the “Company”) hereby certifies that the Company’s Annual Report on Form 10-K for the year ended December 31, 2018 (the “Report”) fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934 and that the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: February 28, 2019

By: /s/ Lynn Jurich

Lynn Jurich
Chief Executive Officer and Director
(Principal Executive Officer)

By: /s/ Bob Komin

Bob Komin
Chief Financial Officer
(Principle Accounting and Financial Officer)